

Troglodytes
hildebrandti

SB 97.41.9 (7)

Anorthura hyemalis

1889 Mass.

April

Belmont - "Did Faxon mention to you that he heard the Winter Wren singing this spring? I think he told me that it sang the full song, but sotto voce" (Loney in let. May 20/89)

Singing in
spring in
E. Mass.

Nov. 14

Melrose Highlands. - "Day before yesterday I heard a Winter Wren sing. He was in full voice and ^(only once) sang the regular summer song, perhaps a little abbreviated" (Loney, letter Nov. 16/89)

Singing
in autumn

Oct. 15

Boston - "Coming out of the Custom House day before yesterday my attention was attracted to a very small bird of a city which at first glance I thought a young English Sparrow. ~~xxx~~ but what was my surprise at a second glance to be a Winter Wren. I stood within ten feet of him as he crouched, ~~mouse~~ like, in the shelter of one of the massive granite columns on the stone floor of the portico and he looked very diminutive by contrast. Did this shy dweller of the most secluded forests seek this building thinking it a cliff on his native mountains? ~~xxx~~ Evidently this bird had no business with the government for after hovering around the huge column for a moment or two he took to his wings & disappeared around the corner of the building" (F. O. Fuller in letter, Oct. 17-1889, to H. A. Purdie)

In the heart
of a city

Anothura hematois

Camp Inverness
Green Hill P.O.
N. H.

My dear Mr. Brewster,

It seems so long since I saw you last that I thought I should like to write you a line. For two weeks I have been staying here with a couple of college friends.

On Thursday, July 30, I found the nest of the Winter Wren. There was a big, rotten birch stump broken off about six feet from the ground, situated in an ash-wood swamp between a meadow and the marsh of a pond. It is nearly half a mile from a house. The place is wild enough to have six Great Blue Herons nests, and

the same as these at Warlagoo and are just as shy. If you have any criticisms on my find I should be glad to share them. I did not destroy the hole or count the young because I thought that that position might be chosen for another year, or a spot close by. Then I occupied next year, I even saw the nest and it still be yours if you desire it.

I had not been there for a week because I sent my niece with a hitekit and have been that time getting over it, but to-day I found the Wrens still in the nest.

Before I came here I had just returned

Water Thrushes are common to say nothing of commoner varieties.

When passing the stump I gave it a slap, and a small brown-rumped bird flew out, but it was some time before I could spy the minute hole a foot from the top. A finger's length in I felt young birds much to my disappointment. The birds kept so shy that I went for my glass and returned later. By watching I saw both Wrens go often from the undergrowth of ferns and brush to the hole.

On writing to Mr. Hathaway to tell me what the birds say about the nesting place, some seem to report the case of one in a hole so high up. These Wrens look

from California. My youngest
sister died this spring, so
as soon as the examinations
were over I went west to bring
my mother home, where she had
spent the winter.

She stayed a little longer so
I could see a little of the
West. I visited the Yosemite
and took a trip to Oregon
and a boat ride up the Columbia.
I procured Mrs. Bailey's Birds of
West. U.S. and I found in
a couple of weeks some seventy
varieties. The dry season is a
poor time for birds in Cal.
I found the nests of the Cal. and
Spurred Towhees, also those of
the Lazuli Bunting, Gold finch and
West. Song sparrow.

I should be glad to hear from
you if you care to write. I
doubt if I stay here much longer
so a letter will find me soon
at 1654 Mass. Ave Cambridge.
Aug 9, '03. Your sincere friend
O. L. Lothrop

Birds of Magdalen Islands.
Dr. L.B. Bishop.

58. *Troglodytes hiemalis*. WINTER WREN.—Tolerably common, heard much more frequently than seen.

Auk, VI. April, 1889. p.149

Dwight. Summer Birds of
Prince Edward Island.

Troglodytes hiemalis. WINTER WREN.—Tolerably common in damp woods along brooks, or sometimes in more open localities. On July 6 I met with a family of young birds able to fly. That so minute a bird should produce such a volume of liquid sound is ever to me a source of wonderment. It is often impossible to see the little fellow when he is pouring forth his song right over your head, but those who have ever entered a dense second-growth of spruces, with a wilderness of dead twigs interlacing below, know one of the difficulties that beset the path of the collector in the northern woods.

Auk X, Jan, 1893. p.14

Birds of Upper St. John.
Batchelder.

13. *Anorthura troglodytes hyemalis* (Vieill.) Coues. WINTER WREN.—This species is common at Houlton,* and no doubt occurs throughout this region; it was seen and heard at Grand Falls, but not observed at Fort Fairfield.

Bull. N. O. C. 7, April, 1882, p.109

An Ornithologist's Summer in Labrador
M. Abbott Frazar.

Troglodytes hyemalis, Winter Wren. Not common, though regularly heard in the thick woods about Esquimaux Point.

O. & O. XII. Mar. 1887. p. 35

Birds of Western Manitoba.
E. E. T. Seton.

236. *Troglodytes hiemalis*. WINTER WREN.—Mr. R. H. Hunter writes me that this species is a common summer resident east of Winnipeg.

Auk, 3, July, 1886. p. 327

Third Addendum to List of Birds Ascertained to Occur within Ten Miles from Point des Monts, Province of Quebec, Canada; Based Chiefly upon the Notes of Napoleon A. Comeau.—(For the original list and first and second addenda see Bull. Nutt. Ornith. Club. Vol. VII, No. 4, Oct., 1882, pp. 233-242; Vol. VIII, No. 4, Oct., 1883, p. 244; and The Auk, Vol. I, No. 3, July, 1884, p. 295.)

171. *Anorthura troglodytes hyemalis*.—A pair of Winter Wrens spent the past summer (1884) at Godbout. They were first seen July 7. This species was not observed in the Gulf by either Mr. Brewster or myself, though it is common in Newfoundland.

C. Hart Merriam.

Auk, 2, Jan., 1886. p. 113.

Locust Grove.
H. Y.

Last Dates Migratory Birds observed by
E. D. Wintle, Fall 1885, Montreal, Can.

Oct. 11. [Winter Wren.]

O. & O. XI. Mar. 1886. p. 44

Summer Birds of Sudbury, Ont.
A. H. Alberger.

722. Winter Wren. Common. Breeds.

O. & O. XV. June, 1890, p. 88

Auk, XV, April, 1898, p. 196.

*Remarkable Ornithological Occurrences
in Nova Scotia.*

WINTER WREN (*Troglodytes hiemalis*).—My brother and myself found a nest of this species, containing a number of young, at Spryfield, near Halifax, on June 11, 1894. It was simply a cavity in moss, *in situ* upon the face of a rock close to the shore of a small lake. This moss *was constantly saturated with water* which trickled from a bank above and slowly flowed over the stone on which the moss grew. There is not the least doubt as to identification, for one of the parent birds was seen entering and leaving the exit several times. We were close alongside and could distinctly see the bird. In May, 1891, we found a nest of the same species only a couple of feet from the site of the one just mentioned. It precisely resembled the latter in form, construction and materials, as well as in being saturated with moisture. A full description of the nest of 1891, which contained a number of eggs, will be found in the 'Transactions' of the N. S. Institute of Science, VIII, 203.—HARRY PIERS, *Halifax, N. S.*

Birds of Toronto, Canada,
by James H. Fleming,

Part II, Land Birds,

Auk, XXIV, Jan., 1907, p. 85.

273. *Olbiorchilus hiemalis*. WINTER WREN.—Common migrant, April 14 to May 7, and September 10 to October 26; latest fall record November 12, 1895; rare winter resident (January 18, 1892; March 17, 1894); very rare summer resident, breeds (June 2, 1894, W. Raine).

Birds of Dead River Region, Me. F. H. C.

14. *Anorthura troglodytes hyemalis*, (Winter Wren). The only individual of this species observed in the county was a female which I flushed from her nest placed between the interstices of the logs in the dam on Tim brook June 3d. The nest was placed in the rank growth of moss which was affixed to the logs and contained five eggs quite fresh. Although these birds were spoken of by the lumbermen as common, I could not catch a glimpse of another during my stay, their quick movements in the thick coverts effectually screening them from view.

O. & O. XI. Aug. 1886, p. 115

BREEDING OF THE WINTER WREN AT HOULTON, ME.

BY RUTHVEN DEANE.

THE finding of the nests of many of our ground-building species is considered by many as a matter of luck; but a thorough acquaintance with the woods and fields in which one is collecting, and a habit of perseverance, often leads to success, and these accomplishments must indeed be attributed to any one who has had the good fortune to discover three nests of the Winter Wren in one season.

About the middle of June, 1878, while collecting at Houlton, Me., Mr. James Bradbury, a resident of the town, showed me a nest of this species partly finished in a little clearing of thick woods on the banks of the Meduxnekeag River. He had previously noticed the bird in the same locality with small twigs in its bill, and after secreting himself at a short distance saw the Wren disappear under the roots of a fallen tree, where it remained for a time, and upon investigation he found the entrance of the nest. It was imbedded in the earth which remained attached to the roots, and it could only be detected by crawling under the thick brush which surrounded the tree; and on looking up, all that could be seen was a small aperture just large enough to admit the tiny birds. The nest was unfortunately deserted, for on the 22d of June we again visited it and it showed no further signs of completion. It was apparently almost finished, but lacked the fine lining of moss and feathers. The external breadth and depth of the nest was 4.50 inches, the internal depth 2.50 inches. It was composed of hemlock twigs, moss, and a few bits of lichens compactly woven together.

Early in June Mr. Bradbury found a nest containing six young a few days old. This nest was sunk into the thick moss which enveloped the trunk of a fallen tree. A bunch of ferns grew out of the moss near the entrance of the nest, and one of the parent birds suddenly flying from the ferns enabled him to discover its little home.

On the 8th of August, 1878, Mr. Bradbury took a third nest of the Winter Wren, which contained four eggs; and I am indebted to my friend, Mr. R. R. McLeod, who visited the locality before it was removed, for the following description: "The nest was in a place which does justice to the name *Troglodytes*, for it was away under an upturned cedar-root in the dark. The tree had blown over somewhat, and in the roof made by the earth and roots she had excavated a hole and made her nest, where but the least glimpse of light could have reached it. A little spring flowed over the rocks beneath, on which the tree stood, and only by watching the bird with a feather in her mouth was the nest discovered. Mr. Bradbury put his head and shoulders under the roots and the Wren fluttered past his face, and diligent search revealed the treasure."

The nest, which is in the possession of Mr. H. A. Purdie, is now before me, and presents a beautiful bit of bird architecture. It differs from the one already described by having the top open, similar to that of *Sayornis fuscus*, though possibly the bird had some natural crevice through which to pass before reaching the nest. It is composed mainly of very compact green moss, with a few hemlock twigs interwoven, and is lined profusely with feathers of the Canada Jay, Blue Jay, and other species, which arch over the eggs so as to almost conceal them. The average measurement of these eggs is .65 by .49 of an inch. The ground-color is pure white, and marked with fine spots of reddish-brown and a few blotches of a darker shade. In one specimen the markings are very small and faint, and free from any blotches. This was undoubtedly a second brood, and one egg was far advanced in incubation.

Ball. N. O. C. 4, Jan., 1879, p. 37-39.

Troglodytes hiemalis.

Peterborough, New Hampshire.

1893. W. Deane found two males in full song, July 24, in deep
 July 5 woods near the brook on Ben Mere farm. Afterwards - on July
 to
 Aug. 15. 29th - I heard what was probably one the these birds in the
 bog near the house.

Breezy Point, Warren, N.H.

Troglodytes hiemalis

1894.

	M.	M.	4000 ft.	4000 ft.	
June	17 ¹ / ₂	18 ¹ / ₂	21 ¹ / ₂	23 ¹ / ₂	24 ¹ / ₂
	Wendell R.	Mt.	1100 ft.	M.	M.
	25 ¹ / ₂	26 ¹ / ₂	(4500 ft.)	27 ¹ / ₂	28 ¹ / ₂
		Bridg.			
	29 ¹ / ₂	30 ¹ / ₂			

Breezy Point, Warren, N.H.

Troglodytes hiemalis

1895.

North Woodstock
 May 16¹/₂ 17¹/₂ 19¹/₂ 26¹/₂ 29¹/₂ N. Faxon.
 29¹/₂ 30¹/₂ Mt. 31¹/₂
 June 1¹/₂ 2¹/₂ 3¹/₂ 4¹/₂ 5¹/₂ 6¹/₂ 7¹/₂ 8¹/₂ 9¹/₂ 10¹/₂ 11¹/₂ 12¹/₂ 13¹/₂ 14¹/₂ 15¹/₂ 16¹/₂ 17¹/₂ 18¹/₂ 19¹/₂ 20¹/₂ 21¹/₂ 22¹/₂ 23¹/₂ 24¹/₂ 25¹/₂ 26¹/₂ 27¹/₂ 28¹/₂ 29¹/₂ 30¹/₂ 31¹/₂
 June 1¹/₂ 2¹/₂ 3¹/₂ 4¹/₂ 5¹/₂ 6¹/₂ 7¹/₂ 8¹/₂ 9¹/₂ 10¹/₂ 11¹/₂ 12¹/₂ 13¹/₂ 14¹/₂ 15¹/₂ 16¹/₂ 17¹/₂ 18¹/₂ 19¹/₂ 20¹/₂ 21¹/₂ 22¹/₂ 23¹/₂ 24¹/₂ 25¹/₂ 26¹/₂ 27¹/₂ 28¹/₂ 29¹/₂ 30¹/₂ 31¹/₂
 " 4¹/₂ Bridge over Baker's Run
 " 6¹/₂ Mt. Moonbank

THE WINTER WREN (*Anorthura troglodytes hiemalis*) IN WESTERN VERMONT.—In the northwestern part of the town of Brandon, lying along the bank of the Otter Creek, is a swamp some three miles in length and from one-half to one and one-half miles in breadth. Formerly this was all heavily timbered, but the timber has been largely removed and at this time but little of the "first-growth" remains; this is near the centre of the swamp. The swamp has an elevation above the sea of probably about 350 feet, and is overflowed by the creek during high water. On June 4 of last year (1882), while botanizing in the heavy "first-growth," my attention was attracted by a pair of Winter Wrens. They constantly darted in and out of a large brush-heap, scolding the while in true Wren fashion, and seemed very desirous that I should leave. A close examination of the brush-heap and vicinity failed to reveal the site of the nest. On July 4 following, I again visited the locality, and about this same brush-heap saw old birds of this species feeding young but a day or two from the nest. This of course set at rest all doubt about their breeding here. I have never seen them in summer before. In the following November I spent two days (24th and 25th) in this swamp and, to my surprise, saw a pair of these Wrens. Snow covered the ground to a depth of two inches or more, and the thermometer was but little above zero. The latest I have noted them before was the first part of October.—F. H. KNOWLTON, Middlebury, Vt. *Bull. N. O. C.* 8, April. 1883, p. 120

SUMMER WINTER WREN, VT.

74. *Anorthura hyemalis*. WINTER WREN.—Mr. Torrey writes me that he noted them several times during his visit in 1885, on the upper part of the mountain. I was disappointed not to find them, but I am certain they were not there in 1899 or 1900, for although the birds might be overlooked, the song is not likely to escape notice.

BY ALBERT E. BOWEN

ALB. E. BOWEN, 1899

Bds. Obs. near Graylock Mt. Berkshire
Co. Mass. June 28-July 16. W. Faxon

68. *Troglodytes hiemalis*. WINTER WREN.—Common in suitable localities on the Saddle-Back Mountains above 2000 feet. At this season they were very confiding, and seemed to take great pride in introducing me to their large and noisy families.

Auk, VI. April, 1889, p. 105

W. McDolesey Co. Mass.
June 25-30, 1889.

Troglodytes hiemalis

Mt Watatic --- In a dense dark forest of black spruces on the western side of the mountain I heard a Winter Wren, June 27th, at an elevation of about 1000 feet. The bird sang once in a gully where I did not hear it distinctly, but a moment later repeated the performance within thirty yards of me. Although we visited these woods several times afterwards, we did not again hear this bird or any others of its kind.

Auk, XIII, April, 1896, p. 178.

Three Winter Wrens from Longwood, Massachusetts.

On the 16th of November I noted in the same locality a Winter Wren (*Troglodytes hiemalis*) and on the 27th shot, I think, the same bird. This is another record of the wintering of this species near Boston, Mass.

Reginald Heber Howe, jr., Longwood, Mass.

PROBABLE BREEDING OF THE WINTER WREN (*Anorthura troglodytes hiemalis*) IN EASTERN MASSACHUSETTS.—Mr. George O. Welch tells me that a pair of Winter Wrens once passed the breeding season in a hemlock grove near Lynn. He first noticed them about the middle of May, when their actions led him to suspect that they were preparing to breed. During subsequent visits—which extended well into June—he rarely failed to hear the song of the male, and frequently its mate would be seen hopping in and out among some holes under the hemlock roots. He feels sure that they had a nest in one of these holes but all his efforts to discover it proved fruitless. At length, about the 10th of June, he shot both birds, thus definitely settling their identity.

The authenticity of the above facts is open to no doubt. They do not prove, of course, that these Wrens actually nested, but such an inference is, to say the least, highly probable. Assuming it granted, the occurrence must still be regarded as exceptional, for the breeding-range of the Winter Wren is sufficiently well known to preclude any serious question of its availability as a "test species" of the Canadian Fauna.—WILLIAM BREWSTER, Cambridge, Mass.

Bull. N. O. C. 8, April, 1888, p. 119.

Mass. (Middlesex Co.)

Anorthura hyemalis

1886

In full song.

Apr. 17

"This morning I heard the Winter Wren again in Melrose within a few rods of the former spot. This bird was literally overflowing with music, his songs following one another so rapidly that until I saw him I was fully persuaded that I was listening to two rival songsters. In all I heard the strain not less than twenty-five times. The morning was dark and foggy but he was not in the least under the weather". (Bradford Torrey in letter of April 17-1886.)

Mass. (Worcester Co.)

Anorthura hyemalis

1886

Breeding.

Mr. S. Perry tells me that he finds one or two pairs of Winter Wrens breeding each season in an extensive swamp in Hubbardston.

Anorthura hyemalis

Breeding in Eastern Mass.

Mr. Welch tells me (Feb. 26, 1883) that a pair of Winter Wrens bred in a huckleberry grove near Lynn a number of years ago. He found them in the same spot day after day, the ♂ being in full song. He often saw them creeping in and out among the huckleberry roots but could not find the nest. Finally about the second week of June he shot them both.

Lynn, Mass.
June

Mass. (Belmont)

Annothis hypoleucis

1888-9

Dec. 1st - Two Winter Wrens have been seen in the same place in Waverley during the entire winter of M. Faxon.

Mass. (Waverley)

Annothis hypoleucis

1888

Singing in autumn - late date

Nov. 15

Mr. Walter Faxon heard a ♂ sing. Its song was full and complete but given in subdued tones.

Dec. 5

In the same place Mr. F. saw two Winter Wrens to-day.

Mass. (Winchendon)

1887

June 26²⁸ - brood of young just on wing

Birds of Bristol County, Mass.
F. W. Andros.

Troglodytes hiemalis Vieill., Winter Wren.
Winter resident, rare.

O. & O. XII, Sept. 1887 p. 141

Annothis hypoleucis

Birds Known to Pass Breeding Season
nr. Winchendon, Mass. Wm. Brewster

Notes on Birds of Winchendon, Mass.
William Brewster.

75. *Troglodytes hiemalis*. * Not common.

Auk, V, Oct., 1888. p. 389

Winter Birds in South-eastern Mass.
Harry G. White

15. Winter Wren. Rarely remains throughout the winter. Recorded at Highland Light on January 10th.

O. & O. Vol. 17, June, 1892 p. 85

Troglodytes hiemalis.—In the swamp where the Olive-sided Flycatchers breed, we heard two Winter Wrens singing June 26, 1887. While trying to get a sight at one of them I flushed and shot a young bird which could not have been more than a day or two from the nest, as it was unable to fly more than a few yards at a time. There were many fallen trees in the vicinity, and their upturned roots, laden with earth and overgrown with moss, afforded numberless nesting sites. As already stated, I did not revisit this swamp in 1888, but Mr. Bailey tells me that he heard the Wrens singing there a few days before our arrival.

Auk, V, Oct., 1888. p. 392

General Notes.

Summer Birds of Central Berkshire
Country, Mass. Francis H. Allen

Ralph Hoffman

25. *Troglodytes hiemalis*. WINTER WREN.—One heard in Great Barrington, fourteen miles north of the Connecticut line; heard also in Becket and Washington.

Auk XII, Jan. 1895 p. 89

Troglodytes hiemalis.

Brookline, Mass.

1897. One bird observed in Brookline, Jan. 19th, 1897.

Note by C.E. Bailey.

1892 Amethusa hyemalis Cambridge + Belmont.
Dec. 2. a ♂ shot by C. R. Lamb
in Fresh Pond Grove.
" 9. One seen in Belmont
by a. P. Christensen.
(note Good C. R. Lamb.)

NOTES FROM HARTFORD.—February 4,
saw a Winter Wren in a dooryard in the
suburbs.

Harry F. Grates.

O. & O. VIII. Jan. 1883. p. 8

Some Birds of Lewis Co. N. Y.
C. Hart Merriam

In the Eastern (Adirondack) region
Anorthura troglodytes var. *hyemalis*, is found breeding.

Bull. N. O. C. 3, April, 1878. p. 53

Oneida County, New York.
William L. Ralph & Egbert Baggs

Troglodytes hiemalis.—We have taken two more nests of this species, June 28 and 29, 1887, at Holland Patent and Trenton Falls. They were placed and constructed almost exactly as the one described in the List, and contained four and six fresh eggs respectively.

Auk, VII. July, 1890, p. 232.

Birds of the Adirondack Region.
C. H. Merriam.

18. *Anorthura troglodytes hyemalis* (Vieillot) Coes. WINTER WREN.—Breeds abundantly. Comes when the melting snow uncovers the mossy logs and brush heaps in April, and follows the wanderings of the mixed flocks in autumn till late in October. A very characteristic bird of the entire Adirondack region.

Bull. N. O. C. 8, Oct., 1881, p. 227

Notes on Some Winter Residents of
Hudson Valley. E. A. Mearns.

5. *Anorthura troglodytes* var. *hyemalis*. WINTER WREN.—The Winter Wren is found in winter in the Hudson Valley at least as far north as Rhinebeck. Mr. Bicknell writes me that "it is somewhat irregular as a winter resident," but does "not consider it unusual to see it any time between October and May (May 4, 1877). It is, however, most abundant in the fall (October)." In the Highlands it is generally common all winter, but is somewhat irregular. It has been abundant during the severest winters, and uncommon, at times, in mild ones. Not plentiful last winter. It is often found in the rushes of the salt marshes beside the Hudson River; feeds, at such times, upon small mollusks.

Bull. N. O. C. 4, Jan., 1879, p. 34

New York (Oneida Co.)

Anorthura hiemalis

Thirteen nests described, twelve probably false

See Ralph & Baggs' Birds Oneida Co.,

p. 143

Notes on the Spring Migration of Birds in the
Northern Adirondacks [Cayuga], New York [1901].

April 25 & 30—

Winter Wren. Tolerably common.

E. A. Stearns, Brooklyn, Pa.

Auk, XIX, July, 1902, p. 298.

Albino Winter Wrens.

BY C. S. BRIMLEY.

On Nov. 14, while out collecting, my brother killed a Winter Wren which had the whole plumage, white or whitish. Next day, while collecting within a few yards of the same place, he took another Wren with white at the base of the wing quills. The query naturally suggests itself as to whether they did not belong to the same brood, and this is the more probable, as in the second one there was precisely the same amount of white on each wing. I append descriptions as of some interest: Winter Wren, female, whole plumage more or less white or whitish, under parts unmarked, markings showing faintly on wing and tail, upper parts with a wash of brownish, top of head darkest; taken Nov. 15, (L. 3 7-8, W. 1 3-4, J. 1 3-16, E. 5 5-8.) Winter Wren, male, partial albino, the basal three-fourths of the primaries and secondaries pure white, a few white spots on wing coverts, the white markings on wing exactly similar; taken Nov. 15, (L. 4 3-16, W. 1 15-16, T. 1 5-16, E. 6 1-8.)

O. & B. ~~XIII~~, Feb. 1888 p. 32

General Notes.

The Winter Wren a Night Singer. — In the long list of birds that sing in the night I do not remember to have seen the name of the Winter Wren. That it sometimes sings on clear wintry days during its temporary sojourn in the vicinity of Philadelphia is probably well known to certain favored people. A bird of this species has for several years made the fastnesses of a thick hemlock hedge in my yard at Haddonfield, N. J., his winter home, and he sometimes favors me with a song in the early morning, even when the ground is covered with snow. Not content with this, he surprised me the other night, about ten o'clock, by one of his sweetest efforts. The song on this occasion was not so loud as that of more wakeful moments, but well-sustained for more than half the usual duration of the nuptial song, and then falling into a scarcely audible trill, as if the little dreamer had waked in the midst of his vision and, like more human sleepers, was reluctant to believe its unreality. — SAMUEL N. RHOADS, *Haddonfield, N. J.*

Auk XII. Jan. 1895 p. 84

Birds of Western North Carolina,
Observations during '86. G.B.Sennett

Troglodytes hiemalis. WINTER WREN.— Common in the balsams of Roan Mountain; at all hours, rain or shine, the exquisite song of this shy bird could be heard even from the balcony of the hotel. I remember hearing four males at one time from as many different directions. I was constantly in search of their nests, and frequently saw them carrying building material, and food to their young, but the clouds, which were only absent at long intervals from the summit of the mountain, would close about me like a veil and I would be obliged to practically feel my way home again, always unsuccessful.

Auk, 4, July 1887. p. 244

The Singing of Birds. E.P. Bicknell.

Anorthura troglodytes hiemalis. WINTER WREN.

A silent migrant with respect to song, though often amply noisy with its ordinary notes, the movement of which fitly corresponds with the excited bobbing of the little brown-plumaged body from which they proceed. Once only have I heard its song in this latitude — on November 21, 1880, a cold and wintry although still morning. The song was three times repeated, and though brief was sufficiently perfect to bring to mind the summer home of its author in mountain forests northward. In winter I have found dark yellow fat encasing its small body.

Auk, I, April, 1884. 138.

THE WINTER WREN BREEDING IN SOUTHERN NEW YORK.—Six miles south of Ithaca, N. Y., and leading eastward from Enfield Falls into the Cayuga Valley, is a beautiful glen. It is long, deep, and narrow, with steeply diverging walls rising, on either side, some three hundred feet above the bed of the stream. Large hemlock, pine, and beech trees are so closely crowded together in it as to preclude effectually the sun's rays, and, with the stream running below them, to secure for the glen a temperature and humidity not unlike what is to be found in the forests of Northern Wisconsin.

In company with my friends, F. H. Severance and W. Trelease, I paid a visit to this glen June 21, 1878. Just below the Falls, where the glen widens, a group of five Winter Wrens (*Anorthura troglodytes* var. *hyemalis*) were discovered darting in and out of a brush-pile which lay a short distance back from the stream. On securing one of these, it was found to be a fully fledged young bird, but so immature as to leave no doubt that it was one of a brood which had been reared in the glen.

F. H. King: Ithaca, N. Y.

Bull. N. O. C. 3, Oct., 1878, p. 194-195.

Interesting Nesting Site of a Winter Wren (*Troglodytes hiemalis*)—Instead of being in "thick, coniferous woods," I found this nest in an upturned beech root in an open part of our deciduous woods. The tree had lodged after falling to an angle of about forty-five degrees, and the nest was stowed away in the earth among the rootlets. The beech was just off from an unused wood road that had grown up to jewel-weed (*Impatiens pallida*); and ferns filled the space up to the very edge of the gap from which the tree turned back, and formed a pretty fringe on top of the root. The May rains had turned the cavity beneath into a clear pool of water, and filled the swampy land back of the tree with similar pools where Red-eyed Vireos and Scarlet Tanagers came to bathe.—FLORENCE

A. MERRIAM, Locust Grove, Lewis County, New York.
Bull. N. O. C., Vol. VII, Oct., 1890, p. 407.

Wren building in deserted Nest of Martin.—A pair of Wrens built last year (1882) in the deserted nest of a Martin, *Hirundo urbana*. The latter was sixteen feet two inches from the ground, with an eastern aspect.—H. J. J. BRYDGES (Boullibrooke, Presteign).

[A curious and interesting instance of...]

The Zoologist, October 1883, Vol. 7, no 82, p. 423.

Wren's Eggs in a Swallow's Nest.—In the last number of 'The Zoologist' (p. 380) is a note by Capt. E. F. Becher respecting the occupation of a Swallow's nest by a Wren. To show that this is not a unique

case I think it worth while to record a similar instance observed by myself. On the 29th May, 1879, I obtained a clutch of five Wren's eggs from a Swallow's nest built under the rafters in the front of a cow-shed at Tunstall, near Sittingbourne, Kent. The nest was evidently not in any way altered by the Wrens, but contained only the few feathers and short hay which I have usually observed in the nest of the Swallow; the original proprietors of the nest were also flying about, and one of them entered it for a moment whilst I was watching. I have little doubt that the Wren had either been robbed of or frightened away from its own habitation when just ready to lay, and therefore adopted the first nest suitable to its requirements.—A. G. BUTLER (British Museum).

NOTES ON THE WINTER WREN (*Anorthura troglodytes hiemalis*).—My chance acquaintance with a chapter in the life-history of this species, during a recent visit to Grand Manan, N.B., may not be uninteresting to the readers of the Bulletin. I was informed by Mr. S. F. Cheney that its occurrence in that locality, where it is called the Spruce Wren, is not common. He has seen an occasional pair in previous years, principally in the winter season, and noted its prolonged sweet song, but he had never met with their nest, supposing always that it was placed on the ground in hollow logs. During the breeding season the dense spruce swamps are its home and in such a situation, upon one of the outlying islands near Grand Manan, I found its snugly hidden nest. At that time no owner appeared and I was ignorant of the value of my prize, but visiting the locality again on June 2, and carefully approaching to avoid disturbing its occupant, if any, to a distance of scarce five feet, I saw, cautiously thrust out from the mass of green moss, a brown little head, followed in a moment by the unmistakable form of the Winter Wren. It displayed scarce any fear, alighting only three or four feet from me, jerking its tail forward over its back and scolding vehemently, somewhat in the manner of our common House Wren. After watching it for several minutes, in my anxiety to procure it, I proceeded to back off through the thick growth, in order to shoot, but it became alarmed at my movements and suddenly dropped to the ground when a hasty shot failed to procure it, nor did either of the pair subsequently appear. The nest was placed about six feet from the ground, in the end of a decaying stub, the irregularities being neatly filled with green wood moss, both below and around the nest proper, which measures outside 5½ inches in depth by 4 in width. The entrance is perfectly round, nearly an inch in diameter, placed two inches from the top, and is strengthened by a framework of a few slender dead spruce twigs, woven into the outside covering of green moss. Above it is well protected by a thick mass of the same green moss which serves so admirably to conceal it from prying eyes. Long, slender, dried grasses form the inner walls, just sufficient to give it strength, and within this a thick lining of soft white feathers of the Herring Gull (*Larus argentatus smithsonianus*). A neater, warmer bird home it would be hard to conceive, and had the little architect not incautiously left a "white feather" partly protruding from the entrance I doubt if I should be its possessor. Five eggs were the full complement in this case. They are ovate, slightly pointed at the smaller end, of a brilliant white ground color, very evenly but sparingly sprinkled with reddish-brown dots, and measure respectively .65 X .49, .65 X .48, .63 X .49, .63 X .47 and .62 X .48. They are larger and less rounded than are the eggs of *Parus atricapillus*, though resembling them somewhat in style of marking.—R. F. PEARSALL, New York City.

Wren utilising a Swallow's Nest.—Noticing a Wren often flying in and out of a shed last week, I found that it had adapted a Swallow's nest to its own requirements. I have known of a House Sparrow's nest being similarly used, but have not previously observed a Swallow's thus taken possession of. In my note last month on a "bold attack by a Partridge" (p. 386), for "Karlstad" read "Karlsbad."—E. F. BECHER (Southwell).

Nest of the Winter Wren.

As my observations and impressions regarding the nesting and other habits of this species (*Troglodytes Hiemalis*), in former years, have already been recorded, I will on the present occasion confine my notes to my experience on this subject for the season of 1892.

I first heard the pleasing melodies of three individuals of this species on the morning of the 7th of April, though it is probable, as the weather had been favorable, that it had made its advent in this vicinity a week earlier. When first noticed, it was in full song, and was common afterwards, though the different individuals were continually shifting their places of habitat. Now one was heard on the margin of the clearing; then, in a short time, its thrilling notes came from the middle of the deep swamp, and may be an hour afterwards its music rose and fell in the centre of the highland wood. And I noticed several mornings, when I had remained out all night in the sugar-bush, that the species was the first, as day began to dawn in the eastern sky, to greet the coming day with its charming melody. As the season advanced I was on the lookout for the nesting-places of the species, and was pleased to find, not far from each other and in my vicinity, several newly formed nests, giving me expectations that I would afterwards collect therefrom one or more sets of their eggs, but in all these early "finds" I was disappointed; for none of them were finished. As previously remarked in other articles on this subject, I believe that this nest-making on the part of the Woodland Wren is the work of the male bird, who leaves it in a certain stage of completeness, and then, if desirable on the part of the female, she puts in the lining preparatory to depositing her eggs. By the first of June I had given up all expectations of collecting any of the eggs of this species, but on the 12th of that month I was taking a last look at some nesting places of other species, and had just secured a fine set, 1-5, of the Canadian Warbler, when, on approaching the margin of a little woody dell, on the northeast corner of wildwood, and near where I was often at work, in a new clearing, the song of this species rose near by. I thought I would take a look. Beneath a large hemlock root that, after the trunk had been sawed off, had fallen back to about two feet off the ground, as I stooped down, so that I could get a view beneath, a Wren darted out of its nest close to the entrance and flew away. Judging from the time, my first impressions were that here was a nest containing either young or eggs in an advanced state of in-

cubation, but on inserting a finger I found that it was not even lined; so I then thought that like the others it would be forsaken; but some days after I found that it was being lined and on the 17th I noted that it contained one egg; then I feared that having touched it the bird would desert it, but three days afterwards I found the bird "at home" and as well as I could tell three more eggs were added. On the 22d, as I concluded that the full set had been deposited, I removed the nest, and found that it contained five eggs. The nest itself was placed in the "roof" of the "turn-up," mostly kept in position by a number of small rootlets, so that the front, sides and part of the bottom were suspended and pretty thick, while the top and back were but little separated from the mould of the "root." It was mostly composed of moss, with a few small brambles and a lot of the dry stalks of hemlock leaves in the front, especially around the entrance hole.

This "find" considerably changed my previous ideas regarding some of the habits of this species.

It now appears that the bird does not desert her nest on account of it being touched by the human hand, but if she has decided to occupy the skeleton nest that the male has formed, she will do so whether it has been touched or not, if she is not otherwise much disturbed. It also appears to nest more than once in the season, as I have reasons to believe that this nest was the second for that bird that season; and its time of commencing to nest in the spring appears also to vary several weeks. Five appear to be the general complement of eggs deposited in each set. This is the number found in the three last nests, of which I have taken particular notes, and the last two of which are now in my collection. The first of these three sets was taken on the 18th of May, the second on the 25th of that month, and this one on the 22d of June. The eggs in this set, to the naked eye, appeared to be pure white, with a pinkish tinge, but this latter hue disappeared on the contents being extracted, and then, when held up between the eye and the light of a lamp, a number of small dottings of a reddish hue appeared over the surface, especially towards the large end. I may here remark that I prefer to "blow" small eggs in the light of the lamp, because, by holding up the specimens between the eye and the light, it can be better be seen if all the contents are extracted; and if not by holding the egg hole side downward over the heat the remainder of the contents ooze out.

Nest of the Winter Wren.

BY WILLIAM L. KELLS, ONTARIO, CANADA.

This species (*Anorthura troglodytes hyemalis*) is pretty evenly distributed in most of the woodlands of Central Ontario, at least I have heard its thrilling song notes in the deep woods of all the localities where I have resided, or visited in the summer season, except on the shore of Lake Huron. It is among the earliest of our feathered exiles to return to its native haunts when the rigor of winter is over, and the more gentle spring is about to open over the fields and the remnant of our forest lands. Always at the opening of the second week of April—let the weather be stormy and cold, or calm and sunny—and though the snow and ice may still be deep and frozen in the woods, the interested observer of nature is sure to hear the cheery song of this active little wild-wood wanderer, coming from out the remains of some gloomily lowland wood where it makes its summer home. On the 6th of April of the present year, though the ground was frozen hard as rock, the snow still deep in the woods, and the wind from the north was bitterly cold; yet, being out at the back woods on my farm—Wild Wood—I was much pleased to hear the glad-some lay of this species, in the same wilds

where in preceding years it lent a charm to the otherwise gloomy scene. For, to my mind, the song notes of but few of our birds has more melody than that of the Winter Wren, and to seek its nesting place and secure some sets of its eggs has occupied the leisure hours of many a spring and summer day; and to attempt to describe some of the haunts of this bird, and the hardships met with, especially after the mosquitoes have developed from their watery cradle, would, I think, discourage most of our closet naturalists, yet in all my hunts and rambles, from our early settlement in the back-woods, only three nests of this species—containing eggs—have come within my observation. Many an old or newly composed nest have I seen, but from the fact that the species builds a number of false nests, and at once forsakes one that is touched by the human hand, certain it is that many a time when I have revisited a nesting place, in the hope of securing the eggs, have I returned disappointed.

In the early part of May, 1887, in company with one of my youngest children, I took a ramble to a piece of woods about a mile and a half south of this town, where I have hunted in the early season for some years past, and every part of which is well known to me. In the centre of this wood is a tract of low swamp which I knew to be the summer habitat of one or two pairs of Winter Wrens, and where I had seen several nests, but failed to procure any eggs. On this occasion I was pleased to note the recent arrival of some of our most pleasing woodland songsters, otherwise we had nearly completed the circuit of the wood without observing anything else worthy of note, except gathering some beautiful wild flowers, when I noticed that a good sized maple tree had lately fallen near our path, and that in its fall it had drawn up with its roots a large piece of earth, which hanging downwards formed a kind of tent or wigwam, and that near by a Winter Wren was charmingly singing. Conjecturing that this might be a nesting place of this species I drew near to investigate. I found in the hut a kind of door, into which I stooped down in order to see within, and there just before in the side of the wall I was pleased to discover the newly formed nest of the Winter Wren. Owing to its form and position and the small entrance, it was of course impossible to see the bottom of the inside of this structure; but warned by past experience I did not dare to intrude a finger, but I rightly judged that it was yet too early in the season for eggs to be deposited, and a close view of the nest

showed that it was being lined in the inside with small feathers. I therefore calculated that in about ten days the nest would be finished and the set of eggs deposited. Accordingly I returned on the 18th, and as I stooped into the cave and no bird flushed out, I began to fear that I was again to be disappointed, but cautiously inserting a finger into the door of the nest I was pleased to find that it contained a number of eggs, one of which I took out, and thought that it looked fresh, then I feared that the set was not completed, but I concluded to take them rather than run the risk of not getting any, as the bird discovering that the nest had been disturbed might destroy the eggs, or some other species of collector might take them before I returned again; and it was well that I did so, for on preparing them I found that they had been several days undergoing the process of incubation. This nest, which I carefully removed, was in form much like that of a mouse, with a small entrance in the side facing outward, and was composed of a species of greenish-yellow moss that grows on the bark of maple and elm trees, in damp woods. On the outward side, in order to make it more firm, especially around the entrance, the little architect had intermingled with the soft moss several bits of small bramble and stalks of dead leaves. The inside, as well as I could see, was neatly lined with the fine feathers of hawks, crows and grouse. The set of eggs was five in number. These were of a clear white hue, dotted, especially towards the larger end, with small spots of a reddish color. In form, size and coloration they can scarcely be distinguished from those of the Chickadee and Brown Creeper.

O. & O. XII, Nov. 1887 p. 183-184

Cistothorus
stellaris

Cuscuthorus stellaris

1889 Mass.

June 14 Readville (or Canton). - Dr. Faxon heard numbers of these Mew singing in the Neponsett River meadows above Readville.

Aug. 10 Melrose Highlands (perhaps Reading!) "Short billed Marsh Mew Late singing
singing freely on the 10th (Faxon let. Aug. 12/89)

1890

May 10 Cambridge. Faxon "heard" one (possibly two) "singing" this evening in Arrived
the meadow between the Central R.R. and Bush Island. The
bird (or birds) must have been migrating for we have been migrant
since heard them during our numerous evening visits (May 27)

" 11 Belmont. - A single bird heard singing in Rock Meadow (Faxon) Reaffirmation

" 14 " At least six birds " " " " " " in an old

" 24 " Faxon tells me that since the 14th he has never visited heard in
Rock Meadows and listened at all attentively without hearing these Belmont
birds. There seem to be at least five or six males settled there,
one on the N. side of the Willows near the S. end, all the
others on the S. side near the N. end. It is a number of years
since the Short-billed Marsh Mew have bred in this meadow. There
is positive that there were none there last season.

May 31 Weyland. - Counted fifteen different birds singing during a paddle Abundance
of about 3 miles up West Brook (from the mouth to East Landing) on West Brook
bow down on this brook they were found side by side with C. palustris at Weyland
but the latter kept in the narrow belt of canary grass along the
banks while all the Short-bills were among the shorter meadow
grass. Where the canary grass ceased (about half way up) we lost
the Long-bills & beyond this point only Short-bills were heard.
The Short-bill is a much less persistent singer than the other
species. Faxon has heard it this season on the brook that
flows through the village of Weyland.

June 15 Neponsett Marshes. Faxon heard 2 birds singing in salt meadows In salt meadows
near mouth of Neponsett River

Oistothorus Atellus

1891 Mass.

May 17 Belmont. At least three different males singing Return to
at sunset in the old haunt in Rock Meadow. old haunt
heard two here on the 15th. The grass is already
three - high.

Readville (Neponset River marshes)

July 6	Nest containing	6 fresh eggs.	} All found by the Bolles Bros. in July, 1891
" 8	" "	2 " "	
" 10	" "	7 slightly incubated "	
" 10	" "	1 fresh egg	
" 17	" "	6 " "	

Nests & eggs

The Bolles Bros. tell me that all of the above noted
nests were found in rather sparse grass not one knee-high.
One was rather well concealed in a thick clump, all the
others were sufficiently conspicuous to attract attention 15 or
20 ft. away. They were placed in the tops of the grass and
were no more difficult to discover than nests of *C. palustris*.
They were all composed outwardly of green grass. No clue
to the locality of the nest could be gathered from the
movements or whereabouts of the ♂ bird. In fact he usually
kept at some distance from the nest and sang in the
longest grass he could find. The boys simply disregarded
him and searched all the short sparse grass in
the meadows systematically. They did not devote much
time to the search and believe that had they done
so they might have found many more nests. They
are very sure that no eggs were laid in this meadow
much before the earliest date above given.

1893

July Concord. Chirp or chup and chue? - s (= roll) see the notes
made by ♀ when nest is approached

Notes

Massachusetts.

Cistothorus stellaris.

1892.

July 9 Concord. A Long-billed Marsh Wren was singing near the Holt and two Short-bills in the hale canary grass on the south side of the Beaver-dam rapids. These Short-bills are new comers to the meadow I stopped to listen to them (on my return) and noted their songs on the spot as follows: Chüp, chüp, er-chüp, chü-chü-chü-chü or chüp, chüp, er-chü-chü-chü-chü or chüp, chüp, chü-r-r-r (the termination a trill much like the Swamp Sparrows but less musical. Both birds gave all these variations.

July 15 Only one Short-billed Marsh Wren singing at the Beaver-dam Rapids. Its song this evening was quite regularly chüp, chüp, chü-t-t-t-t-t the only variation being in the ending which sometimes had the r-r-r-r-r quality.

Cistothorus stellaris.

Canton, Mass.

Nests, Eggs and Breeding Habits.

1893. At about 9 A.M. we (Jack and Charles Bowles and I) started for the Meadow where the Marsh Wrens breed, following a narrow wood path which leads down a long steep hillside through oak and pine woods. On reaching the meadow we started at once to search for Wrens's nests and kept it up unceasingly until 1 P.M. when we returned to the house. Although the day was cool for the season we suffered severely from heat and thirst for the grass was tall and dense and the walking very hard.

The scene of our labors was a meadow some 500 yards in length by from 100 to 200 yards in width through which Ponkapog Brook winds its sluggish course. This Meadow is somewhat higher than the Neponsett (Fowl) Meadows into and through which the brook afterwards flows. It is surrounded on every side by maple and birch woods and is dotted here and there by clumps of alders and other bushes. It is everywhere intersected by narrow ditches which, however, fail to drain it effectually for most of the ground is wet and in many places covered with two or three inches of water. The growth of grasses is unusually varied, large tracts or belts of "blue-joint" (*Phalaris*) alternating with stretches of the shorter, finer tussock grass (*Carex stricta*) while considerable areas were covered with the short, coarse, broad-leaved "cut-grass".

Cistothorus stellaris.

Canton, Mass.

1893. The Marsh Wrens (all C. stellaris) were pretty evenly
July 10. distributed over the entire meadow. About a dozen males were
(No.2). heard singing in all. They did not appear to prefer or avoid
any particular kind of grass but the nests at this season are
oftenest built in the fine tussock grass according to Mr.
Bowles's experience. The early June nests on the other hand
are almost invariably in the Phalaris which, of course, is the
only grass tall enough at that season to afford the necessary
shelter.

I saw in all to-day ten nests of this species, two last
year's nests still firmly held among the old grass, six
"cock", "false", or "decoy" nests, and two nests with seven
incubated and three fresh eggs respectively. Of these ten
nests two were in Phalaris, seven in tussock grass, and the
tenth (the nest with 7 eggs) in a tract of cut grass but sup-
ported by both cut and tussock grass intermixed and inter-
twined. All ten nests were composed of dry grasses of last
year's growth but all but one of the new nests were so com-
pletely covered outwardly by the interlaced stems of the liv-
ing grasses by which they were surrounded and supported that
at the distance of a few feet they appeared wholly green.
They differed from the typical nest of the Long-billed Wren
in being considerably smaller, shallower and hence much round-
er and more symmetrical, and in lacking all trace of the

Cistothorus stellaris.

Canton, Mass.

1893. protrubance or portico which is usually built out over the
July 10. entrance to the Long-bill's nest, the entrance being merely
(No.3). a small round hole in the side. Some of the eggs in both of
the occupied nests could be seen by merely looking into the
hole from above (I have never succeeded in seeing Long-bill's
eggs in this way). The fresh eggs had a strongly marked ro-
seate tinge and the shells appeared rough. The incubated eggs
were plain with a marked polish. The shells were much thinner
than those of the Long-bill's eggs and Mr. Bowles finds that it
is not safe to roll the Short-bill's eggs out of the nest.

The occupied and the false nests were similar and equally
well furnished in every respect save that the former were
warmly and prettily lined with feathers, the latter with fine
dry grass only. In position I could not discover that the two
differed at all. Indeed the nest with 7 eggs was quite as
conspicuous as were any of the "cock" nests. All the nests
which I saw were built from 2 to 3 feet above the ground. Their
small size, globular shape, the fine, dense character of the
grass in which they were placed and the envelope of green
grass woven about them, rendered them much less conspicuous
than is the average nest of C. palustris but yet it was not
at all difficult to see them. Indeed the tangle of green
grasses bent down from every side and intertwinced often caught

Cistothorus stellaris.

Canton, Mass.

1893. my eye from a distance of several yards. We found short,
July 10. light poles of great assistance in parting the dense beds of
(No.4). grass as we walked through them.

Mr. Bowles thinks the "false" nests are built partly to save time in case the eggs are destroyed. In one instance a bird which he robbed laid a second set in a "false" nest which was only a rod or two away. The presence of one or more false nests, however, gives little or no clue ordinarily to the position of the occupied one which is often many rods away. Indeed the false nests are usually scattered about at random all over the meadow. We found none to-day anywhere near either of the nests that contained eggs.

I found, personally, the nest with seven eggs and three new false nests. All the others had been found previously by the Bowles Bros. and were shown me.

The male Wren sometimes wings very near the nest, often 100 yards or more away. The female always slips off before the intruder is near and is never surprised on the nest. The bird whose nest I took came close about us (within two or three yards) as we were packing the eggs, keeping well concealed but making the grass stems tremble as she flitted and hopped through them and uttering a low, guttural churr.

Cistothorus stellaris.

Concord, Mass.

Nest and eggs.

1893. At 3 P.M. I started up river in the open canoe.

July 20. In the little meadow just above Heath's Bridge I heard a short-billed Marsh Wren singing on the 14th. He was there again to-day and as I had taken my rubber boots I decided to look for a nest. But first I ran the canoe into a little creek and with my head just above the bank watched the meadow awhile. Presently a Wren, the male, I thought, appeared flying low over the grass and hovering a moment above it dropped out of sight. After a moment he reappeared and flew away to some distance when the song began again. Within five minutes he flew back to the same spot and again disappeared in the grass for a moment, then flew away again and I again heard the song 50 yards or more distant. I was not able to trace the flight of the bird with sufficient accuracy to make sure that it was the same which I heard singing but I believe that such was the case. I had marked the spot carefully and now went to it. When I was within about 20 feet my eye was attracted by a tangle of grasses which had been bent down and intertwined leaving a slight open space above. To my delight these intertwined grass blades concealed a nest which contained four fresh eggs. The entrance hole was of nearly double ^{the usual} size but well concealed by the grasses woven above and around it. From every side the nest presented the appearance of a green tangle of fine grass. It was about fifteen inches above the

Cistothorus stellaris.

Concord, Mass.

Nest and eggs.

1893. ground. The grass was of the short, wiry kind known as cut
July 20. grass (*Carex monile*, fide W.Deane). During his trips to the
(No.2). nest the bird, as far as I could see, had nothing in his bill.
I left the nest unmolested in the hope that more eggs would
be laid. (There were six on the 22nd and no more on the 23rd
when I took the set).

July 23. Up river with W.Deane in the forenoon rowing to Clamshell
Hill and sailing thence to Fairhaven, stopping by the way to
visit the Marsh Wren's nest near Heath's Bridge. The number
of eggs had not been added to since yesterday so I assumed
that the set was complete and took both eggs and nest. The
male was singing about sixty yards away when we landed. We
walked directly to the nest and stood within three or four
feet of it for a minute or more, talking. Then I stooped to
look in when the female darted out of the entrance hole and
dropping to, or nearly to, the ground made off through the
grass, probably springing from stem to stem but keeping so
well concealed that I could not see her. The trembling of the
stems served to trace her route and progress pretty accurately
however. After she had gone a few yards I rushed after her
when she flushed and flew off slowly and heavily. The Bowles
Bros. have never started a bird from the nest but in this in-
stance I probably surprised the bird by approaching swiftly
and silently along the path which I had made during previous

Cistothorus stellaris.

Concord, Mass.
1893.

Nest and eggs.

July 23. visits. She came about as we were packing the eggs and uttered her scolding churr but did not again show herself. Yesterday while I was at the nest she kept flying from place to place in the grass near me carrying in her bill something white or whitish about half the size of one of her own eggs. The female of the nest taken at Canton, June 10th also came about us with a similar whitish object in her bill. At the time we supposed her to be feeding young of the first brood but I am very sure there were no young in this Heath Bridge meadow yesterday.

It was perfectly easy to see the eggs in this nest-or at least most of them-by merely bending the nest over so that the sunlight could shine in. They looked very transparent and had a decided rosy tinge. I rolled them out of the nest just as I always roll out Long-bill's eggs and with perfect success although Bowles considers it a dangerous experiment. The shells of these eggs although thinner than those of the Long-bill's were decidedly thicker than the shell of a Warbler's egg. They had a slight polish before they were blown.

Cistothorus stellaris.

Concord, Mass.

1893. Searched for nests to-day in Pantry Brook Meadow, but
July 22. without success. Did not even find a "cock" nest. Four males
singing. In one place I roused the female who followed me about
scolding. Frightfully hot. (Abstract from journal).

July 23. At Pantry Brook yesterday I noticed that each male Wren
occupied or rather monopolized an area of several acres no
two male birds singing nearer each other than about 200 yards.
Faxon thinks, and no doubt correctly, that the scarcity of
birds in this meadow this season is due to the fact that the
meadow was entirely ^{under} water at about the time of their arrival
forcing them to choose breeding grounds elsewhere. This the-
ory will also explain their total absence this season on the
Great Meadows below Concord.

A female Short-bill on Pantry Brook meadow yesterday came
very near me hovering over the grass and dropping into it ut-
tering a scolding churrr or sometimes a low chip or chup. I
looked vainly for a nest but started two full grown birds
which I took to be young. The great difficulty is to hit upon
the immediate vicinity of the nest in such a sea of grass. I
found no decoy nests.

Cistothorus stellaris.

Concord, Mass.

1893. To my great surprise two Short-billed Marsh Wrens were
Aug.10. singing vigorously this afternoon in the meadows opposite
Ball's Hill. These birds must have come to this meadow within
the past week. I have not heard one before this season along
the river below Concord.

Aug.11. The two Short-billed Marsh Wrens sang all day long, at
intervals, in the meadow opposite the cabin. They had moved
their position since yesterday to a large area of grass which
the mowers have not yet reached.

Cistothorus stellaris.

Concord, Mass.

Singing at night.

1898. At the upper end of the Holt but very near the river
June 6. bank (this evening as I was paddling back from Concord to the
 cabin in the dark) three Short -billed Marsh Wrens were sing-
 ing, not interruptedly or at wide intervals, as most diurnal
 birds sing when heard at night, but steadily, continuously and
 with really exceptional vigor while the intervals between the
 songs were much shorter than I have ever known them to be in
 the daytime. The Concord clock struck nine as I sat listening
 and the night was as dark and rainy as ever, I have little
 doubt that these Wrens kept up their concert during the re-
 mainder of the night.

ROLAND HAYWARD,
MEMBER BOSTON STOCK EXCHANGE.

WILLIAM S. TOWNSEND.

HAYWARD & TOWNSEND,
Stock Brokers,

TELEPHONE 2773.

NO. 40 STATE STREET.

P. O. Box 1943.

Boston, 25 July 1892

My dear Will

So far as I see now
I will be up on the train which
leaves Boston nearest to 3 o'clock on
the Lowell R.R. either Thursday
or Friday afternoon to make you
a short-call. Please let me know
which would be the most convenient
to you. If neither is convenient do
not hesitate to say so and I will
arrange to come another time. I
went with Jack Bolles to get the
^(Cistothorus pallidus)
nest yesterday. The bird had
built a new layer over the seven
eggs first laid and Bolles told me
had laid three new eggs. We found
yesterday that a snake had gotten
into the nest and taken the three

eggs on the new stage and one of
the seven first-laid. Bolles has the
nest for you however with the six
remaining eggs, if you want it. I
will explain the matter more fully
when I see you as I am in a great
hurry now.

Affectionately Yours
Polaris Heyward

Cistothorus stellaris

Ponkapog, Mass.

June 5, 1894.

Dear Dr. Brewster,

Dr. Hayward told me a day
or two ago that you had returned
from your foreign trip which,
I am glad to hear, was a success.

I have taken a few notes this
spring which would, I think, be
of some interest to you.

The Red-poll Warblers were more
plentiful this spring than ever
before, but the Cape May, of which
I am sure I saw several last year, has
been wanting. It would be impossible
for me to mistake one for the other
more than once, that is, at the short
distances I saw them last year.

hatched. Then regularly laying two sets of eggs (set on about June 1st, laid out on or about July 4th). The year determined to make a study of it and have devoted all my spare time to it, else I should probably have found more evidence.

The following data establish beyond a doubt that two sets are laid, and that sometimes, more than seven eggs to a set.

May 25th: $m_1^{(1)}$, $m_1^{(2)}$, $m_1^{(3)}$, $m_1^{(4)}$, $m_1^{(5)}$. 92 numbers above the set one egg to one set and not
June 4th: $m_1^{(1)}$; June 5th: $m_1^{(1)}$, $m_1^{(2)}$, $m_1^{(3)}$, $m_1^{(4)}$, $m_1^{(5)}$, the last two were

shakily turned and ready for next egg set which I hope grows.

I am also trying to discover the period of incubation as one of my birds has been sitting on six eggs for days. Today they seemed almost ready to hatch, but I don't if they will for a day or two longer.

It seems strange that, although I took a number of sets last year, the birds are far more numerous this year than ever before, because, as you know, the nests with eggs found represent but a small percentage of those actually laid.

The White-throat will & Woodcock nests were found by my dog on a dry hillside within 50 yards of each other. I was told by hunters there are very numerous, I took a nest twice eggs yesterday and know of several more.

Hoping that the above will be of interest to you, I am, yours very truly, J. W. Swales.

eggs
the
nest
remains
will
when
hatched

eggs
the 2 My principal oölogical finds
nest have been Sharp-shinned Hawk $\frac{n}{14}$
+ one (fresh) on May 22nd.

will ✓ American Bittern $\frac{n}{5}$ (slightly
when incubated) on May 25th

hum ✓ Whip-poor-Will $\frac{n}{2}$ (1/2 incubated)
on May 26th

✓ Least Flycatcher $\frac{n}{5}$ on May 26th (is
5 very commonly found?)

✓ American Woodcock $\frac{n}{3}$ (1/4 incubated)
on May 27th

Also took some very pretty sets &
well incubated sets of Parula Warbler
at Fall River on May 30th.

I have decided to put the following
apart from the above as there
is so much to say about it.

Last year I think you shared
my doubts as to the Short-billed

Cistothorus stellaris. Nesting 16 miles from
Brewer, Maine.

Copy.

Friend Brewster,

x x x x x. Lately a hunter described the nests & eggs of a bird he found nesting every year in large numbers in Great Works Meadows - some 16 miles from here. He said that the nests were in the meadow grass and fastened to the stalks or else to some small bush among the grass - that they were covered, and entered by a hole in the side - that the eggs were white - that the bird stuck its tail up like a wren - and that he found the nests & eggs while haying in July. This description fits the Short-billed Marsh Wren. As this man certainly never read any bird book in his life, and is a reliable man, it seems certain that this bird breeds regularly every year, though I never to my knowledge ever saw one or ever heard of one before in this part of Maine. It seems as if both this and the rails were regular breeders in the described localities but probably not often found elsewhere in this vicinity. x x x x x x

Very truly,

M. Hardy.

Brewer, Maine, Sept. 13, 1901.

Birds of Toronto, Canada,

by James H. Fleming,

Part II, Land Birds,

Auk, XXIV, Jan., 1907, p.85.

274. *Cistothorus stellaris*. SHORT-BILLED MARSH WREN.—Two records, a female August 29, 1891, and a male June 7, 1895, both taken by Mr. C. W. Nash.¹

¹ Auk, XIII, 1896, 347.

The Short-billed Marsh Wren (*Cistothorus stellaris*) in Maine.—In Smith's List of the Birds of Maine (cf. Smith, Forest and Stream, Vol. XIX, p. 445) this species is credited to Maine upon the strength of nests and eggs said to have been taken near Bangor. In my recently published list (cf. Knight, List of Birds of Maine, p. 141) the species in question is hypothetically included upon Mr. Smith's evidence, and upon the belief that I had seen the species in a marsh near this city, though at that time I had not secured any specimens.

May 30, 1898, I secured an adult male of this species, in full breeding plumage, which has already been recorded (cf. Knight, Maine Sportsman, Dec. 1898, p. 8). This specimen was secured in a low, somewhat bushy meadow within two miles of the Bangor postoffice, the locality being the same where I thought I had seen the species during the late summer two or three years previously.

On the day when this specimen was taken, I was returning from a short outing, and when passing the meadow a gust of wind brought to my ear the notes of an unknown song uttered in a key that seemed dimly familiar. Again the notes were heard as I stood eagerly listening, and then my mind was carried back to the sage-clad hills of southern California where oft I had stood and listened to the echoing notes of the Pallid Wren Tit, similar, yet still far different from those just heard.

Again and yet again the song was heard in different directions, and soon the musicians, five Short-billed Marsh Wrens, were located in different portions of the meadow. While singing they seemed to perch conspicuously on the tops of low bushes, but on being approached they would descend into the tangled growth of sedges and skulk along in advance of me, uttering a low grating note of alarm or defiance.

The females seemed quieter and kept out of the way, though two individuals were seen which seemed, judging by the attention paid them by what were probably their mates, to belong to the gentler sex.

The specimen secured was judged to be a male and on dissection proved of this sex. For several days thereafter I frequented the locality in hopes of finding nests or eggs, but though the birds remained all summer I was unable to get proof positive that they nested, but of course they did so. My departure for California in mid-August put an end to further observations for the season.

A second specimen, also a male, had been secured on July 3. On comparison with individuals loaned me by Mr. Brewster, which were taken near Cambridge and elsewhere in Massachusetts, the Bangor birds were found practically identical in coloration and measurements.

The specimens were also compared with a series of birds from the U. S. National Museum collection, loaned me through the kindness of Prof. Ridgway, and found to be practically undifferentiable from any of these save two very pale-colored examples from Dakota.

Judging by the series examined, our eastern specimens are all referable to the only recognized race now on our list. Examples from the regions bordering the Plains are considerably paler in coloration, especially on the back, and study of a series of breeding birds from the West may show sufficient differences to make advisable their separation as a subspecies.—

ORA W. KNIGHT, Bangor, Me. Auk, XVI, July, 1899, pp. 281-283

Cistothorus stellaris. ^{1 singing} Aug. 7 Rye Beach, N. H. 1872.

THE SHORT-BILLED MARSH WREN IN NEW HAMPSHIRE.—On the 24th of August, 1881, while investigating the recesses of a fresh water marsh at Rye Beach, N. H., I found a colony of Short-billed Marsh Wrens (*Cistothorus stellaris*) in a small meadow about a mile from the sea. One bird was shot, and five or six others seen and heard.

Mr. Wm. Brewster in 1872 found this bird in the same vicinity, but in a locality about five miles farther inland.

These two records extend the northern range of the Short-billed Marsh Wren, and give it a place among the birds of New Hampshire.—HENRY M. SPELMAN, Cambridge, Mass.

Bull. N. O. C., 7, April, 1882, p. 118.

Cistothorus stellaris.

New Haven, Vermont.

1897. " The Short-billed Marsh Wren is known to reside, nest, and breed in the town of New Haven, Vt. They only occur to my knowledge in a bit of marshy ground containing perhaps five acres. I have seen a nest of the species taken in Williston, this state and a friend tells me a few pairs breed there. Outside of these two places I do not know of their occurrence. You spoke of regarding this as confidential. You may do as you like about it."

Extract from letter from S.O.Brush, Sept.16, 1897,

Milton, Vermont.

Middlesex Co., Mass.

Cistothorus stellaris

1884.

Belmont, Mass.

June 12. Heard a ♂ singing in the very spot (on the south side of the "Willows") where Henshaw & I killed four or six years or twelve years ago. I have not heard of any there for certainly six or or seven years. Lamb & Chadbourne tell me that they have searched in vain for them this season over the Fresh Pond marshes, about Beach Island &c.

June 23. A single ♂ on Rock Meadow about two hundred yards west of where I saw the one on June 12 but probably the

Mass. (near Concord).

1887

June 7⁴ - 17⁸
July 7⁴ - 15^{10 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100}
Aug 10⁴

† Panty Brook ✓ Great Meadows # Sudbury Meadows
* singing ♀ = young or very

Cistothorus stellaris

General Notes.

Summer Birds of Central Berkshire
Country, Mass. Francis H. Allen. Ralph Hoffmann

26. Cistothorus stellaris. SHORT-BILLED MARSH WREN. — Locally common in Stockbridge.

been bird, the very highest part
 11 A. M. of a clear but cool day
 with light west wind in hills
 but few grass, so tall that it
 reached nearly to my shoulder.
 It was well down in the grass
 when showing himself, I started
 him and chased him about
 for some time. At first he
 was very wary, but a few times
 he came forward, after which he
 took to flying slowly, allowing
 me to advance step by step
 when he showed he would
 rise nearly straight up to a
 height of about fifteen feet,
 fly slowly, like a young bird
 about forty yards, and drop
 abruptly like a hawk. Once
 he took to a clump of button
 bushes, I searched for his nest
 or mate but could find
 neither.

Mass. (near Concord).

1887

	♂	♀
June 7 th	17 ⁸ / ₁₀	17 ⁸ / ₁₀
July 7 th	15 ¹⁰ / ₁₀	15 ¹⁰ / ₁₀
Aug. 10 th	10 ¹⁰ / ₁₀	10 ¹⁰ / ₁₀

† Panty Brook ✓ Great Meadows # Sudbury Meadows
 # keeping ♀ = young one wing
Cistothorus stellaris

General Notes.

Summer Birds of Central Berkshire
 Country, Mass. Francis H. Allen, Ralph Hoffmann

26. *Cistothorus stellaris*. SHORT-BILLED MARSH WREN. — Locally
 common in Stockbridge.

1887

Young as wing

July 15

Visited the Panting Brook colony. About ten ♂♂ heard. Flushed two broods of young, but failed but able to fly well. They uttered an incessant hungry chirp something like young Warblers but with a trace of the Wren chatter. An old ♂♂ were in full song. They usually perched, while singing, on the top of an Eupatorium or Archangelica stalk & could be seen hundreds of yards away. I think they were roar & ring. Searched long for nests but found only one, unfinished & evidently false. Shot two old ♂♂. Both had the testes of

1882Cistothorus PellaeusBelmontMay 6

One shot in
Belmont by C.R. Lamb.
This is an early date.

enormous from the typical placentalis
about the same brother & sister.
They are evidently brother & sister &
probably have two brother & sister.
The young are must be two
weeks from egg which would
make date of first laying about
June 20.

1882

Cistothorus stellatus

Belmont

May 6. One shot in
Belmont by C.R. Lamb.
This is an early date.

Mass. (Reading)

Cistothorus stellaris

1887

Aug 4 Two ♂♂ singing in a meadow bordering
Spruce River, here a narrow stream, but
little more than a large brook.

Mass. (Wayland)

Cistothorus stellaris

June 7 Three ♂♂ singing in the Barnum Brook meadows.
" 17 They were in patches of their favorite fine meadow grass
which, however, were interspersed with areas of coarse
grass, rushes, or flags swarming with *C. palustris*. Thus
the two species were living literally side by side,
an unusual condition of things. The host-birds
were apparently in full song. I shot two of the three
♂♂ and also a ♀ but failed to find the latter.
All three were much tamer than the song-birds.
Their chatter is precisely like that of *C. palustris*
as well as *I. aedon*. They also utter a low grating

MUSEUM OF COMPARATIVE ZOOLOGY,

CAMBRIDGE, MASS.

Dec. 26, 1902

Dear Brewster,

In your article on Fresh Pond Swamp
in "Bird-Lore" I think you spoke of the disap-
pearance of *Cistothorus stellaris* from those
marshes. Did you know there was a male (probably
with a mate) singing there in the same place in
June & July, 1899? I found him there from June
22 - July 28, between Fitchburg & Mass. Cent. R.R.

Mass. (Reading)

Cistothorus stellaris

1887

Aug 4 Two ♂s singing in a meadow bordering
Spruce River, here a narrow stream, but
little more than a large brook.

heard also used by *C. palustris*.
June 17. On this same meadow
found five ♂s singing to day & two
heard 9. First all the ♂s sing twice
or full air. They are louder than
C. palustris and perhaps more common.
Remaining more in the tops of the grass.
They also sing more in plain sight.
On the whole I find them much
easier to shoot. The ♂ has all the
particular manner of the song. bird
flying with the head held up, when the
line of the back and the wings keep
repeatedly, yet the bird moving very slowly
measured. When holding the tail is also
beet up on the back until it is
nearly or quite under the head, this
however, only occasionally apparently, as
a bit of buffing that implies a
shakedown. I do not remember to have
seen *C. stellaris* ever straight up to sing
in the manner of *C. palustris* but it
often sings at the end of a short
horizontal flight, just upon alighting.

trades. By the way have you no separation
of your Bird-Love article? I was very
much interested in it

Yrs sincerely
W. T. Faxon

The Short-billed Marsh Wren (*Cistothorus stellaris*) on Long Island in Winter.—On December 28, 1913, Messrs. George W. Hubbell, Jr., Nicholas F. Lenssen and I were at Jones Beach, Long Island, for the purpose of studying waterfowl. During the afternoon, while searching for Myrtle Warblers and sparrows in a large tract of bay-berry bushes Mr. Lenssen found a bird unknown to him, which proved to be a Short-billed Marsh Wren. It was perched on a bush about a foot from the ground eyeing us with great curiosity. The bird by its actions was half-dead with the cold, as it permitted the three of us to approach within four feet, and finally flew away passing between two of us who were not more than two feet apart. It was finally stunned with a bay-berry stick and caught alive. This is the fourth record of the occurrence of this species on Long Island, and so far as I know, the first winter record for New York state. The specimen is now in the American Museum of Natural History.

—LUDLOW GRISCOM, *New York City. Aug. xxxi. Apr. 1914. 7. 253.*

Some Birds of Lewis Co, N. Y.
C. Hart Merriam

Cistothorus stellaris. SHORT-BILLED MARSH WREN.—Mr. Romeyn B. Hough has, in his cabinet, two females of this Wren, which he killed near Lowville, in this county, October 27, 1877.

Bull. N. O. C. 4, Jan., 1879, p. 6

*Third addendum to List of Birds of
Adirondack Region C. Hart Merriam.*

207. *Cistothorus stellaris*. SHORT-BILLED MARSH WREN.—Mr. Romeyn B. Hough shot two females of this Wren, October 27, 1877, in the town of New Bremen in Lewis County, and writes me that he is "confident that they breed there every year."

Auk, I, Jan., 1884, p. 57.

BREEDING OF THE SHORT-BILLED MARSH WREN (*Cistothorus stellaris*) IN THE HUDSON HIGHLANDS.—In June, 1882, I found a nest in some "cat-tails" and rank grass in the marsh at the mouth of Moodna Creek, at Cornwall on the Hudson. The nest contained three white eggs, one of which is in my collection. This bird, of somewhat local distribution, has not hitherto been reported from the Highlands of the Hudson River.

—ETTINGE ROE, *Cornwall-on-the-Hudson, N. Y.*

Bull. N. O. C. 8, July, 1883, p. 179.

Hudson
Highlands.

[17.1.] *Cistothorus stellaris* (Licht.). SHORT-BILLED MARSH WREN.—A summer resident; not rare at Cornwall, on the Hudson, where its nests and eggs were taken by Mr. Ettinge Roe, in June, 1882, as recorded in the Bulletin of the Nuttall Ornithological Club, Vol. VIII, p. 179.

Mearns,
Jan. 1890, p. 56

Long Island, New York.
Capture of the Short-billed Marsh Wren (*Cistothorus stellaris*) on Long Island, N. Y.—On Sept. 12, 1908, I secured an immature female of this species, at Freeport. The bird associated with a few Long-billed Marsh Wrens in the reeds bordering a small pool of water, where the salt marshes join the mainland.—J. A. WENEN, *Faliscades Park, N. J.*

Auk 26, Jan. 1909, p. 82.

Nesting of the Short-Billed Marsh Wren.

Not having seen anything in the O. & O. about the Short-billed Marsh Wren (*Cistothorus stellaris*) I thought it might be of interest to some of its readers to hear my experience with them.

In a narrow belt of thick, wild grass near the edge of a marshy piece of ground, having a small stream running through the centre covered with a dense growth of cattail flags with now and then a bunch of willows, is where I first saw the Short-billed Marsh Wren and afterwards found their nests. Although I have done considerable collecting in the same locality for the past few years I have never seen or heard one of the birds there until this year, and I think they have not been there before.

On June 3d I saw but one pair there, and others came at different times until on July 6th there were four pairs in the marsh.

On June 12th there was a nest completed, and supposing there would be eggs laid in it I left it, and afterwards found it to be nothing but a duplicate nest. On the 22d I found a nest in the same vicinity containing some pieces of shells, the eggs having been broken in some way.

On July 6th I collected two sets of their eggs, one of three fresh ones—an incomplete set. These were within a few yards of where I found the nest containing the broken ones, and I think they were laid by the same bird. In the other set there were seven, with incubation advanced.

I also found two nests of another pair, and a week later they had another nest completed, and on the 20th I went there and could neither see nor hear a wren in the marsh. I was there again afterwards and could find none, so I supposed they had all left, but on Aug. 13th my father, in company with a young man (who is interested in birds), being near there thought he would show him some of their nests, so he found one, and supposing it to be empty stuck his finger into the entrance and broke one egg out of a set of six that it contained, the remainder of which he got out, and although they were badly incubated I saved them all right.

The nests were built in the wild grass about one and one half feet high, being about eight or ten inches from the top of the grass. They are globular in shape with a small hole in one side for an entrance. The inner nest is composed of the dead blades of wild grass, lined with cattail down, having the green grass woven around it so as to conceal the dry grass of the nest, making them difficult to find.

Like their Long-billed cousin they build four or five duplicate nests. The duplicates are not as nicely built as the ones containing eggs, and have none of the soft downy lining of the others. I usually found the male bird in some bush within a few rods of the nests, singing his song of *chip, chip, per chick, chick, chick and chip, chip, chr-r-r-r*, uttered distinctly.

The stomach of a male that I collected contained numerous small insects.

The eggs are pure white, unmarked; set one are nearly elliptical in shape, and measure as follows: .63 x .47, .63 x .46 and .63 x .48. Set two are of the usual shape, and measure .62 x .47, .60 x .48, .59 x .47, .61 x .47, .64 x .48, .60 x .48 and .61 x .49. Set three are shaped like set two and measure .60 x .46, .58 x .44, .59 x .45, .61 x .46 and .61 x .45.

Although Davie says they are very fragile, I only found one egg in the lot that seemed any more so than is usual among eggs of their size.

E. W. Durfee.

Wayne Co., Mich.

1890, p. 156.

Cistothorus stellaris.

A Comparison of the nesting habits of the Long-billed and Short-billed Marsh Wren.

C.W. Bowles.

O. & O. Vol. 18, Jan. 1893, pp. 8-11.

See under Cistothorus palustris.

nesting. Dates. Short-billed Marsh Wren.

- June 12. 1897. F. J. Birtwell. nest 7 young just hatched. Reformat meadows -
June. 6th 1898. set 6 fresh eggs - Dorchester Mass.
June 8th 1900. " 7 " " Punkapog Mass. nest held 1 egg. May 30th
June 7th 1901 " 7 " " " nest held 4 eggs - June 2 - when found.
This set taken by F. H. Kennard. Same pair as last (6-8-1900) nest in a
small meadow, one acre, occupied by only one pair.
June 18th 1901. set 6 eggs nearly fresh. Sherborn Mass. nest found apparently
finished on June 9th. Set taken by F. H. K.
July. 20th 1901. nest nearly finished. Sherborn. (second brood)
June 17th 1903. set 6 eggs. Punkapog Mass. taken by A. C. Bent. nest found by
me on the 10th with 2 eggs. This is possibly a second laying as
Oswin Duerger took a set in the vicinity May 30th, although that pair
were about.
June 4th 1904. set 7 eggs. half incubated Norwood Mass.
June 12th 1904. " 7 " fresh. Norwood Mass. taken by Oswin Duerger - nest
found apparently finished on the 4th.

See Bowles. Q. & Q. Jan. 1893.

I am almost sure Duerger has taken one other set in Canton on Memorial
Day some years ago. in company with Bowles boys.

F. B. W. Kechie

19. *Cistothorus stellaris*.

Autumnal plumage: young male. Above similar to adult, but darker, especially on nape and pileum. Throat and abdomen light buff; breast, sides, anal region, and crissum rusty-brown, paler and with white tip-pings to the feathers anteriorly. From a specimen in my collection shot at Cambridge, Mass., September 19, 1870.

Bull. N.O.C. 3, Jan., 1878, p. 22.

The Singing of Birds. E. P. Bicknell.

Cistothorus stellaris. SHORT-BILLED MARSH WREN.

The scarcity and local distribution of this Wren has prevented the acquirement of data sufficiently numerous for defining its periods of song. Two periods, however, are indicated; one ending before the close of August, the other beginning about a month later and continuing at favorable times until the bird's departure. One of these Wrens was heard in full song almost daily between August 12 and 21, 1881, but nothing was afterward heard from the species until September 18. At this date the songs lacked the vigor and definition of those of a month earlier, but were more prolonged. This change was carried a step farther in the songs of an individual taken September 22, 1878. I have no record of songs between this date and October 23. In 1880, on the latter date (a late one for the species), one was taken while singing, but the song was so subdued and rambling as scarcely to be recognizable. Thus three at least of our Wrens show the same character of variation in song from spring to fall.

The summer song of this bird normally presents three well defined variations. Such versatility is unusual in a species, the song of which is of such a definite number of distinct notes. I have heard all three variations successively produced by the same bird, showing them to come within the normal scope of its vocal powers. What appears to be the typical song may be represented thus: *chit, chit, che-che-che-che*; and one of the variations thus: *chit, tit, ter-r-r-r-t*, the last part with a grating sound. In the former song the notes of the last part are of about half the time of the first; in the variation they are much more rapid. In the third variation they are not so hurried and less harsh.

Auk, I, April, 1884. 139-140.

Cistothorus stellaris in Florida

— Wm Brewster.

See under *Coturniculus lecontei*.

Bull. N.O.C. 7, April, 1882, p. 121.

palustris

Mass

Cistiothorus palustris

1886 Wayland

June 16 Visited the famous Wayland colony to-day. It extends along both banks of the Sudbury River for about half a mile but I was disappointed in the number of birds. In all I certainly did not see and hear over twenty. The ♂s were in full song and made a great racket. The song, guttural, bubbling, and rather loud, whick, tick, a-rick-a-rick a-rick or a-rick, a-ricker-ricker-ricker, the same bird using both variations. The ♀s frequently sang in the air, mounting straight upward about 20 ft., their wings vibrating rapidly as they poised with the head held well up, then dropping back into the reeds with closed wings.

They were breeding exclusively in beds of the rank canary grass (*Phalaris arundinacea*) 6 to 7 ft. tall) more or less intermixed with sweet flag. I found many false nests, the majority in canary grass, a few in flags, but none containing eggs. Yet the eggs must have been laid for one of the ♀s which I shot was incubating.

The ♂s usually sang low down in the grass & when the wind was blowing it was next to impossible to find them. When still a slight trembling motion of the stalk to which the little bird clung usually betrayed his position. When pursued they would move quickly and silently off keeping well concealed but betraying their movements by the slight quivering of the stems as they hopped or flitted through them.

Both sexes uttered a low grating sound very like that of the House Wren. The song has a bubbling watery quality. It is exceedingly emphatic but not musical.

Cistothorus palustris.

1889

June 3^d Concord 6^d Brookline 6^d May 13^d 14^d 16^d 18^d 1889 1890.

July 7^d 16^d 22^d (Faxon) 1889.

Aug

Sept. 13^d (Faxon) 1890.

Oct. 7^d 1894

Nov. 12^d 8^d (1889) 13^d 21^d 30^d 1890. 1^d (Ant. Pond) 1897

Dec. 8^d 10^d (1889) One from Bay View 1895

Jan 7 2^d 3^d 7^d 13^d (Faxon) 1890

March 4^d (Faxon) 1890.

May 18^d 21^d 22^d 24^d 25^d 28^d 30^d 31^d 1890 15^d 18^d 21^d 23^d 1891 17^d 18^d 29^d 31^d 1898

April 29^d (Faxon) 1894

June 21^d Concord 30^d 1895 7^d 9^d 12^d 24^d 1895 1^d 1895

C. palustris

July 12^d 22^d 9^d 15^d Concord 1892

5^d (Concord) 6^d (6) 14^d (near monthly) 19^d (St. W. Window) 22^d (St. W. Window) 23^d (St. W. Window) Concord 1893.

August

Nov. 13^d (Faxon)

Cistothorus palustris

Eastern Massachusetts.

1889 Mass.

- June 5 Cambridge. - A small colony on nearly the old ground near "Beach Island". They were surely on the west instead of, as formerly, the east side of the path across the meadow to the bridge over the brook. I flushed as many as six different birds but heard only one ♂ singing. Found two nests both freshly lined with mud and probably "false" nests. One was in flags, the other in tall canary grass. Distribution
- " 6 Brookline. - At least two different ♂♂ singing in dense beds of tall cat-tail flags (no grass or sedges intermixed) on Muddy River. Mr. Francis assures me that they nest here in the cat-tail flags. This species does not seem to sing late into the evening. At least the birds heard this afternoon were silent after the twilight fell. Distribution
Breeding in
cat-tails.

Silent after
sunset.
- " 7 Cambridge. - A branch of the old colony S.W. of Beach Island. Two ♂♂ singing in tall canary grass. I took down the song as wick-wick-k-r-k-ee-eee-ick varying to wis-wis-wis-kree-eee-ick. It is guttural in tone and if not exactly musical a pleasing and most interesting performance. I heard a ♂ sing twice some time after sunset, when it decidedly dusky in fact. Distribution

Song
- " 9 At least three ♂♂ singing near Beach Island. One in a bunch of tall flags sat in one spot for several minutes evidently singing at us turning his head from side to side in a plainly conscious manner. The most musical portion of the song is the terminal half. Sings late
into twilight

Song
- " 13 One of the nests found June 5 held five fresh eggs to day. It nest, 5 eggs was very conspicuously placed in the top of an isolated bunch of flags growing in the middle of a ditch. The other nest which was much better concealed proved a false nest. Bird not sitting but cooed me from neighbouring sedges. ♂ sings directly
over nest

Cistothorus palustris

1889 Mass.

June 14 Headville. - Dr. Faxon heard numbers singing in the marshes along the Neponsett River a mile or two above the Headville station.

" 16 : Weyland. - Rather more numerous than in 1887, and distributed from the brook marsh near the hotel as far down river at least as the third bridge below the town. The ♂♂ in full song until sunset, after that they sang a little until dark. After dark we heard them sings at night perhaps once every ten minutes as late as 11 P.M. although the night was very dark. Faxon & Torrey who had a room on the river side of the hotel awoke several times during the night to hear them still singing. The scold of this town is very like that of the Hona scold, Wren but perhaps a little rougher.

Dec. 9/10 Cambridge. - One seen by N. Faxon in the ^{just north of Glendale Park,} Fresh Pond marshes. In Cambridge it was evidently a ♂ for it sang once or twice. It found in December two of these Wrens in the ^{Black Island meadow and one Nov. 8} ~~same place~~, Nov. 1st. There were numbers there during the first half of Sept. but all seemed to depart about the 15th of that month. One of those seen in Nov. 1st sang a few times.

[This bird was last seen Jan. 2, 1890 unless the one seen by us both on the 3rd was the same. ^(although repeatedly looked for) None seen later than the 3rd in the Fresh Pond marshes. The particular bed of flags in which Faxon's bird lived was burned over Jan. 26. During the latter part of January we had many cold days with therm falling to 8° & 10° & meadows frozen hard enough to bear.]

1890

Jan'y 2 Cambridge. Faxon found his bird in the same place as in Dec, Wintering
" 3 " Faxon & I searched in vain for this bird seen by him yesterday but we found what was doubtless another in the cat-tail swamp near Post Pond. We "creeped" it out into plain sight twice but most of the time it kept hidden in the dense rushes chattering at us in low tones. The cat tails, but one & broken down from little thickened ^{leaves} ~~leaves~~ affording good shelter from wind & rain.

Cistothorus palustris

1889 Mass

July 7 Cambridge - Spent an hour (6-7 P.M.) near the Bush Island meadows but did not either see or hear a single Wren. Decline of singing season
later, however, (about 7.30 P.M.) two ♂♂ sang a few times in the cat-tail bog just north of Port Pond, a locality where in cat-tails
there was certainly none in June. Probably their singing season is about over.

" 16 During two hours (6 to 8 P.M.) spent near the Bush Id. without singing
meadows I heard only one bird sing. He gave the usual song three or four times, rather listlessly & without the usual termination. Saw several birds which flitted about me, skidding and making their progress through the tall grass & cat-tails by the trembling of the blades.

Aug "Two Song-billed Wrens sang persistently in the Fresh Pond late singing
swamps last week" (W. Faxon letter of Aug. 6-1889)

1890

Jan'y 7 Arlington - "I to-day visited a cat-tail marsh near Mystic Pond. Wintering
Standing on the edge I "creeped" and was answered by near Mystic
a little chorus of bird voices, chiefly Song Sparrows - but Pond, Arlington
among them I detected the metallic chirp of the Swamp Sparrow and the chuck of the Marsh Wren. Afterwards &c I stood within 10 or 12 feet of the Wren who looked plump & happy like the Fresh Pond marsh bird (or birds). I wish I could hear one sing in January." (W. Faxon letter Jan. 7-1890)

" 13 Faxon shot the Arlington bird and gave it to me in the flesh. It Specimen shot
proved to be in good condition in fact actually fat. The stomach & dissected.
contained fragments of beetles, ~~to~~ Beetle and shreds of vegetable matter, ^{apparently from the cat-tail stalks.}
Since the 7th we have had a short spell of severe weather. On the 9th the therm. fell to 12° on the 10th to 14°. About four inches of snow fell during these days. While in pursuit of his bird this morning F. traversed the marsh on the ice which was everywhere thick enough to bear his weight.

Oistothorus palustris

1890 Mass.

May 18 Cambridge. - Two in cat-tails at Port Pond in full song. Another singing Arrival
at 8.30 P.M. (the night very dark) in cat tails N. of Glacial's. None singing at
have been reported before this which is probably somewhere near this night
first arrival. Faxon noted a *C. stellatus* on the 10th

June 5 A Marsh Wren among the cat-tails at Port Pond frequently, but by Universal song
no means invariably, prefixes and ends the normal song with a
wit-wit-wit-wit-wit. The prefix is usually shorter than the ending
and often only wit-wit or wit-wit-wit. Both prefix and ending
are similar in every respect. The added notes are very rich and
musical and wholly unlike anything I have heard from the
species before.

1891

May 15 Cambridge. - Heard two ♂♂ singing in the cat-tails Arrival?
north of Glacial's. They are the first reported this spring.

" 18 Inspected the meadows north of Glacial's thoroughly this Early
afternoon and found a greater number of birds than nesting
I have ever seen them before at least ten different
mads being heard singing. To my great surprise
they, with their mates, were working on nests which
in most cases were nearly completed, the majority
having the outer walls quite finished and the
interior plastered with wet mud. The entrance holes
faced all points of the compass. In most cases False nests
there were two or three, and occasionally as many
as four, new nests (all about equally far advanced)
within a space of a few square yards and within
the little domain watched over by a single pair
of birds.

June 1. 3 North Truro. - Not a bird seen or heard in the extensive beds Absence at
of cat-tails (about 300 acres) around the Salt Pond. Miller N. Truro
has found them here in migrations there only.

Cistothorus palustris.

Concord, Mass.

1899. The bird which breed at Beaver Dam Rapid just above
June. Ball's Hill always arrive late. I heard the first one there
this season June 1st. As I left the cabin shortly after this
date I did not make any further observations on this colony
which seldom contains more than two or three pairs.

Cistothorus palustris.

Fresh Pond, Cambridge, Mass.

1899. Mr. G. M. Allen sent the following report to the Nuttall
May 11. Club of an observation made by himself. The report was read
May 15th:-

Two Long-billed Marsh Wrens. One of these two Wrens was watched for about twenty minutes, as it stayed near the edge of the cat tail bog by the railroad tracks. The bird was apparently alone and sang frequently and so was almost certainly a male. It would climb up a cat tail stem and sing once or twice in the usual way turning its head from side to side, and then would drop down among the dead rushes and after hopping about a few seconds, seize the end of a dead cat tail leaf, pull off a strip several inches in length, and fly with it to a spot among the rushes where was the beginning of a nest. This nest was a mere framework, roughly globular, and was being constantly added to while watched. It was among dead rushes about a foot from the water as the new growth had not yet reached above that height. The bird made many of these short trips during the time it was observed, and always stopped to sing a few times between the trips for material. At no time did it go farther than twenty feet from its nest.

Auk, XV, April, 1898, p. 192.

Long-billed Marsh Wren in New Brunswick.—A specimen of this bird (*Cistothorus palustris*) was taken by me on October 3, 1895, in a marsh near Fairville, a suburb of St. Johns, New Brunswick. This specimen was presented to Mr. John Brittain of the Provincial Normal School, who confirms my identification. Correspondence with members of the Natural History Society of St. John, develops the fact that there is no previous record of the capture of this species in New Brunswick.—WILLIE H. MOORE, *Scotch Lake, N. B.*

68.

Summer Birds of the Salt Mining Region,
Nipissing District, Ontario.

by Frederick C. Hubel, Auk XXIV, Jan., 1907, p. 52

68. *Cistothorus palustris*. LONG-BILLED MARSH WREN.—Met with several times on a marsh near Cross Lake. Undoubtedly the same pair observed each time.

Birds of Toronto, Canada,

by James H. Fleming,

Part II, Land Birds,

Auk, XXIV, Jan., 1907, p. 85.

275. *Telmatochlamys palustris*. LONG-BILLED MARSH WREN.—Common summer resident, April 14 to October 18; breeds (June 5 to July 28).

1883

Cambridge, Mass.

August — Band found a pair
evidently breeding on the
Charles River marshes (salt) just
above Simon's Hill on the Cambridge
side of the river. He found one of
their nests but it was evidently a
false one.

Mass. (Middlesex Co.)

Sturnatodytes palustris ✓

1886

The Wayland colony

June 16

Visited the famous Wayland colony today.
It extends along both banks of the river for about
half a mile but I was disappointed in the number
of birds. In all I certainly did not see & hear one
hundred males. They were in full song and made
a great racket. The song is short, loud, guttural,
and bubbling. Whick, rick, a-rick-a-rick, a-rick,
or a-rick, a-ricker-ricker-ricker are the common
variations. The ♂ sang frequently in the air
mounting straight up to about 20 ft. ~~and~~
~~his~~ their wings ~~are~~ vibrating rapidly as they purred,

Mass (Wayland)

Cistothorus palustris

1887

Nesting habits etc.

June 17 Visited the Wayland colony to-day. There were probably a hundred ♂♂ singing along Bassum Brook and as many more on the river from Wayland to the lower end of the meadows. Two ♀s shot were incubating & had laid all their eggs but I failed to find a nest with eggs altho' I inspected probably twenty empty ones. In several instances watched the ♂♂ at work on their false nests. They labored with wonderful energy, going from and returning to the nest every minute or two. They went only a yard or two

Mass. (near Concord).

1887

June 6⁵² - 7²⁵⁰ inc. - 16¹⁰² - 17²⁵³
July 7¹⁴ - 15⁵ - 24¹⁴ - 25¹⁴

✓ Great Meadows, Concord # Sidbury Meadows

* singing. inc = ♀ shot incubating

Cistothorus palustris

Mass. (Hyannis) Rare occurrence on the sea coast.

1887

Oct. 15-16 One shot on the 15th another seen the next day (both on Great Id.) by H. W. Houghans. The first was in beach grass on the edge of a single dry, sandy bluff; the other was in sedge on the edge of a creek.

Leimnarchus palustris.

Birds of Bristol County, Mass.
F. W. Andros.

Cistothorus palustris (Wils.), Long-billed
Marsh Wren. Summer resident, rare. Breeds.

O. & O. XII, Sept. 1887 p. 141

them descending to the base of the rocks pulled away at a short of mud or water soaked flag and detaching it carried it to the river from within the nest this effort to place the piece in its intended position caused the whole structure to tumble. They invariably worked inside & out and satisfied that after the framework is made all the work is done within. All the partially completed nests were looking wet as rain. Several that were apparently completed except for lining. This shows how especially they are made for the laid work has been hot and sunny. The day must adhere to the materials used finally bakes in the sun to becoming very like adobe making the nest very strong. The birds when at work always sing once or twice just as they leave the nest on their way to the ground often more than once. Many little spots!

Mass. (near Concord).

1887

June 6³⁰ - 7²⁰ inc. - 16¹⁰⁰ - 17²⁵⁰
July 7¹⁵ - 15⁵ - 24¹⁵ - 25¹⁵

✓ Great Meadows, Concord # Sibley Meadows
* singing inc = ♀ shot incubating

Cistothorus palustris

Mass. (Hingham) Rare occurrence on the sea coast.

1887

Oct. 15-16 One shot on the 16th another seen the next day (both on Great Id.) by H. W. Henshaw. The first was in beach grass on the edge of a high dry, sandy bluff; the other was in sedge on the edge of a creek.

Salmastodactylus palustris.

Birds of Bristol County, Mass.
F. W. Andros.

Cistothorus palustris (Wils.), Long-billed
Marsh Wren. Summer resident, rare. Breeds.

O. & O. XII, Sept. 1887 p. 141

On November 1, 1889, I found two Long-billed Marsh Wrens (*Cistothorus palustris*), in the Fresh Pond Marshes, Cambridge, several weeks after the migration of this species was supposed to be over. One of them was in full song. I again came upon one of them, Nov. 8, near the same place, and, on examining the close cover formed by the dried and matted cat-tail flags, I began to suspect that a few of these birds might winter there. I again met with one on three successive days in December (Dec. 8, 9 and 10) in another part of the same marshes. These days were warm for the season, although the marshes had been frozen over, and the brave little bird was still singing with almost as much ardor as in spring. I next saw the Wren on January 2 and 3, 1890. Wondering whether its presence here in midwinter was an accident or no, I bethought myself of another similar cat-tail swamp in Arlington, near the Medford line, and a visit to this place on January 7 was rewarded by the finding of a Long-billed Marsh Wren there also. This bird I shot on the 13th of January. It proved to be a male — fat and in fine plumage. Its stomach was still filled with the remains of coleopterous larvæ. The bird was again seen in the Fresh Pond marshes on the morning of March 4, when my thermometer registered 4° F. and about a foot of snow lay on the ground.

I believe that the Long-billed Marsh Wren has not hitherto been found wintering in the East further north than the Carolinas, but the western race (*C. p. paludicola*) is said by Cooper (Geol. Surv. Cal. Orn., I, 75) to winter on the Pacific coast as far north as the Columbia River, in marshes overgrown with *tulé* (*Scirpus palustris*). Dr. Merrill (Auk, V, 362) also observed that a few passed the winter at Fort Klamath, Oregon, where the winters must be very severe. The rôle of the *tulé* is played in the East by the cat-tail flags (*Typha latifolia* and *T. angustifolia*). *Walter Faxon*

Auk, VII, Oct., 1890, p. 489.

✓ *Cistothorus palustris* — Nov. 1, 1889. Fresh Pond marshes, Cambridge.
Two specimens, one singing. Nov. 8, 1889. One, same place.
Dec. 8, 9, 10, 1889. One spec. in another part of same marshes —
sang on the 8th and 10th. Jan. 2, 1890. One, same place
as in Dec. Jan. 3, 1890. One, in ^{another} ~~other~~ part of same marshes.
(W. Faxon)

Cistothorus palustris
Fresh Pond marshes —
1889.
Nov. 1, 8.
Dec. 8, 9, 10.
1890.
Jan. 2, 3, 7 (Arlington, Mystic Rd.), 13 (do.).
Mar. 4 (in cat-tails betw. Fort Rd. & F. R. R.).
* singing.

(notes by W. Faxon)

Unusual Winter Records

Long-billed Marsh Wren. One seen in the Fresh Pond marshes until February 12.

Arthur C. Conney, Cambridge.
Mass. Auk, XIX, July, 1902, p. 293.

Notes on the Summer Birds of Berkshire County, Massachusetts.

Cistothorus palustris. A pair were found inhabiting a small flag-grown meadow brook in Hoosac Swamp in Williamstown (600 ft.). Pontoosuc Lake is the only other locality in the county from which they have been recorded.

Reginald Heber Howe, Jr., Longwood, Mass.
Auk, XIX, Oct., 1902, p. 405.

Feb 19, 1903

Dear Mr Brewster

CN
Looking over my notes I can find but one Long-billed Marsh Wren record for the swamp below the Waverley Camp. That was on June 9th 1900 and as it was the first time I had ever seen them, the place became naturally associated with them in my mind. I think that very likely I have seen them there since and when I see a bird in several different places I often note the number seen and omit the localities.

Yours sincerely,
Richard P. Ellis

1881

Cistothorus palustris Cambridge

Oct. 8

One shot by C. R.
found in marsh on west
side of Glacialis.

Unusual Winter Records

Long-billed Marsh Wren. One seen in the Fresh Pond marshes until February 12.

Arthur C. Coney, Cambridge.
Mass. Auk, XIX, July, 1902, p. 293.

Notes on the Summer Birds of Berkshire County,
Massachusetts.

Cistothorus palustris. A pair were found inhabiting a small flag-grown meadow brook in Hoosac Swamp in Williamstown (600 ft.). Pontoosuc Lake is the only other locality in the county from which they have been recorded.

Reginald Heber Howe, Jr., Longwood, Mass.

Auk, XIX, Oct., 1902, p. 405.

1881

Cistothorus palustris Cambridge

Oct. 8

One shot by C. R.
found in marsh on west
side of Glacialis.



CAMBRIDGE
STATION

THE SPACE ABOVE IS RESERVED FOR POSTMARK.

POSTAL CARD.

THE SPACE BELOW IS FOR THE ADDRESS ONLY.

Mr William Brewster
145 Brattle St
Cambridge
Mass



Berlin Mass. July 9-05.

Dear Mr. Thayer,

There were 3 nests found
of Long-bill Marsh Wren. Two with eggs 5+6,
the other not used. Nests attached to
grass six ft. tall, $\frac{1}{2}$ way up. Inc. slight.
One rod from river. Late June 18-05.
I am sorry not to include it in my
Berlin list, (it being about $\frac{1}{4}$ m. over the
line in Hudson.) It would have been
very hard to have found nests if they had
not been located June 4th, before grass
was so tall. Nests were being built then.

Yours truly

Myron S. Wheeler.

Dear Mr. Deane. —
This may interest
Mr. Brewster. Thank you
when you are through with it.
The bottle of this thing was
found at the house of Henshaw's Sparrow
in 1905. Can you send up
for a few days? Mrs. Thayer and I
J. E. T.

Cistothorus palustris

Hartford, Conn.

July 18, 1893,

Dear Mr. Brewster: -

Many thanks
for your kind letter.

I read with this the French
Heron I mentioned, with the
following notes made while the
specimen was in the flesh.

Bill blackish above, paler below; especially
base lower anastomosis; gape yellow; eyelid
~~blackish~~ bluish; iris dark; legs dull brown.

Find a description of white
eggs of the Long-billed Marsh Wren
in the Cat. Vol. XIV, pages 89 & 92.

Very truly yours,

John B. B. Allen

have a few chrome clark split him with the rest of the
shell, which was not apparent while the eggs were unbroken.

I do not care to do any thing at present
regarding incubating them, but if I decide to do either
and go will write you before it is so. If they prove to
be *C. palustris*, as is I suppose most probable, I may present
one set to the Smithsonian & to figure it in Capt. Bendire's
work, in case they are more like them than the collection.

Capt. Bendire told me he should figure no new eggs
which were not the property of the Smithsonian. This I think
rather a mistake, but the Life History of the C. B. is

very narrow for doubtless that my
eggs are those of *C. palustris* are —
(1) the rather peculiar strain of forward,
(2) the fragility and translucence of the
egg shell in these specimens, (3) the slightly
smaller size, & more nearly spherical shape
of both nests than the average nest of
C. palustris, and also that they are
composed of somewhat finer materials,
and (4) the fact that, since I wrote you,
on July 14, I found that I think an
unquestionable nest of *C. stellatus* in
a fresh-water swamp about two miles
from where these eggs were taken.

Unfortunately this nest was empty,
but I heard a Wren singing near it,
both on July 13 & 14, which was certainly
not *C. palustris*.

On the other hand I find that
one or two eggs in the second nest

June 18, 1893

7795 Wren

Birds observed in Naval Hospital
Grounds, Brooklyn, G. M. Collins

25. *Cistothorus palustris*. LONG-BILLED MARSH-WREN. — Very rare.

Bull. N. O. C. 4, Jan., 1879, p. 32

Birds of Adirondack Region — Merriam.

186. *Telmatodytes palustris*. LONG-BILLED MARSH WREN. — Dr. A. K. Fisher writes me that he took a nest and three eggs of this species at Lake George, in Warren Co., August 2, 1882.

Bull. N. O. C. 7, Oct, 1882, p. 256

Descriptions of First Plumage of Cer-
tain North Am. Bbs. Wm. Brewster.

18. *Teimatomytes palustris*.

First plumage: female. Entire pileum, nape, and interscapular region dull black; no white streaking or spots; otherwise like adult. From specimen in my collection taken at Cambridge, August 10, 1873.

Bull. N. O. C. 3, Jan., 1878, p. 22.

$\frac{1}{2}$ - when - when - when - when

Very like the cattle
of the chain

A talking machine voice

Good tēhē - tēhē - tēhē; Tōhāy - tōhāy - tōhāy;
or, tō tō tō in the House of

Auk, I, April, 1884. 138-139.

BY C. H. PARKHILL.

About half way between Lake Champlain and Snake Mountain, that historic land mark of Revolutionary times, lies a marsh forty or fifty rods wide and miles in extent, through which winds a black sluggish stream known as Dead Creek. June 11th, 1887, accompanied by a friend, we started for a day's collecting among the reeds of this marsh.

Arriving upon the scene, we found the Long-billed Marsh Wren in large numbers and at once began searching for their eggs. After examining at least one hundred nests we gave it up, not having taken a single set. We came to the conclusion that it was early for them. While pushing our boat among the reeds to examine one of their nests, I discovered a nest of the Virginia Rail. It was composed of grass and reeds raised about six inches from the water, was quite shallow, and contained eight eggs, slightly incubated. The bird remained on the nest when we were within six feet of her, and even then did not fly till I touched her with a pole.

Towards night the Rails set up a cackle from all directions, accompanied here and there by the deep base voices of the American Bittern.

We learned that if we would get at the inhabitants of the marsh we must come prepared to wade in the mud and water.

Our next trip was made on June 18th, when we went provided with an extra suit of clothes. Upon arriving at the place of action we immediately prepared ourselves for our day's tramp in the mud and water, which was up to our boot tops, with an occasional hole which would take us in to our waist. Our first capture was a Carolina Rail, which I shot as it flew out of the reeds. We also found a large number of nests of the Red-winged Blackbird.

On one side of the marsh was a tangle of willows from six to ten feet high. In the thick tops of these the Wrens had placed their globular nests, and a good many are attached to the tall reeds, some not more than a foot from the water and others at least ten feet high. Their nests are certainly a curiosity in the line of bird architecture, not unlike a cocoon in shape. They are composed of a mass of grass, reeds and dead vegetation, with an entrance on one side, sometimes near the top and again near the bottom, which is nearly closed up with the down of the willow and the cat-tail, with which the nest is lined. We examined a large number of these nests and succeeded in taking half a dozen sets of their little chocolate-colored eggs.

As we went ashore for our dinner we took a stroll through a hard wood near by, where we took several small birds, two nests of the Wood Pewee, and found half a dozen of the Summer Warbler, which we did not disturb.

On returning to the bog the first bird which we started was an American Bittern, which I shot. As I went to secure my bird my friend exclaimed that he had found the nest. It was as large around as a bushel basket, flat on top, built of coarse grass, reeds, etc., and contained four fresh eggs. Upon digging into the nest we discovered the fifth egg which had been completely buried from sight. We succeeded during the afternoon in securing three more specimens of the Bittern.

As the sun went down the Rails set up their usual cackle and we tried to trace some of them out, but after a faithful search we gave it up, not having succeeded in starting a single one from the reeds.

Towards evening, mud-begrimmed and thoroughly fatigued, we returned to land in quest of a much needed bath and refreshing sleep.

O. & O. XII, Oct. 1888 p. 157

Nests of Long-billed Marsh Wren.

O. & O. XI, Mar. 1890, p. 34.

It has often been noticed that the Long-billed Marsh Wren (*Telmatoptyles palustris*), builds many more nests than are occupied by the birds, and it has been suggested that perhaps this was done as an amusement, by the males, while the females are sitting on their eggs. Mr. J. W. Preston, of Baxter, Iowa, writes that he is of opinion that the true reason is on account of meadow mice getting into them; and that this wren will not remain in the nests when they have been disturbed in any way. In case of the latter event happening the wrens at once build a new home; and Mr. Preston says he has seen more than fifty new nests in one small marsh, all of which were deserted, and some of them contained portions of egg shells, evidently the work of mice.

Observations on Nest-Building by
Walter Hoxie, Turin, N. H.
of Chocoma River

Quite near this nest I took one of a Long-billed Marsh Wren with two entrances instead of one. One was much larger than the other.

Notes on the Nesting of Some of the Rarer Birds of Chester County, Pa.

BY THOMAS H. JACKSON, WEST CHESTER, PA.

During the latter part of May, 1886, while exploring an extensive swamp within a few miles of West Chester, my attention was attracted by a strange, unfamiliar bird note coming from a clump of Calamus that grew in about two feet of water. Pausing a moment to listen for the song again, the bird flew from its hiding place to a tree near by, uttering at the same time its harsh, rattling song.

In it I recognized the Long-billed Marsh Wren (*Telmatoptyles palustris*) a species which though quite common in the adjoining County of Delaware, has never before been seen, or its nest found within our limits.

A further search revealed a number of finished, though unoccupied nests, located in clusters in various parts of the swamp.

At this time there were probably eight or ten nests in different stages of composition, but none of them contained eggs. About three weeks later, on the 12th of June, in company with a friend I again visited the locality. The birds were still there; one of them, probably the male, singing constantly, and flying restlessly from one spot to another. After searching the whole ground over, and examining twenty or more nests, we at last came upon the right one in a bunch of tall Calamus, containing six eggs. Five of these were well advanced; the sixth perfectly fresh.

It is possible that there might have been two or more pairs of these birds in the swamp, as it seems almost incredible that a single pair of them could construct so many nests; but I could not find any more birds.

This set of eggs was a typical one of the Long-billed Marsh Wren, though probably somewhat darker than the average. The nest was composed mainly of coarse blades of grass (tussock) woven in with the leaves of the Calamus, and lined with pieces of dead leaves, a few feathers and other soft material. It hung about eighteen inches above the water, and was by no means a conspicuous object.

the bird for a time may be able to elude you, completely. But at last, after much patient work, you will have the game just where you want it. You can name the bird, you know its habits, all about its mating and nesting, the size and color of its eggs, where it builds and what it eats. You have tried to catch the meaning of its various calls and songs with fair success. Its form and color are indelibly fixed in the mind and the bird has almost become to you a veritable possession.

The work undertaken has been accomplished; yet, notwithstanding all this, a new field of labor of large proportions opens before you. The many evidences of intelligence and reason will now occupy your mind. The results of previous study must become manifest. The real harvest period has arrived, and it ought to be fruitful.

After having made the acquaintance of our Winter birds, the Spring migrations will be looked for with considerable pleasure.

The Crow will probably show the first indications of discontent. Having made some observations during the past season (1882) on the mooted question as to the migrations of Crows, I propose in the next article to give facts and figures bearing on this point.—*G. R. C., Norwich, Ct.*

Long-billed Marsh Wren.

"There is much in a name," and if we judge in this instance by the length, we might expect to see an enormous bird like the fabulous "Roc," and were it not for our dislike of change of names and trouble in definitions, we would suggest an exchange. But what these little visitors lack in size they make up in numbers. They come late in April or in the early part of May and spread over the salt marshes from Florida to Massachusetts; and on the Jersey coast one could count hundreds of nests in an afternoon. Their song is not sweet, for they utter a harsh cry, compared

by some to the noise of some large insect, like the cricket or katy-did. They are active and full of alarms, and the word that enemies are at hand passes along the line with great rapidity, so that it seldom happens that they are surprised in their nests, although they are impervious to the light. Sentinels are ever on guard. Late in April, or early in May, the flight of the pigmies commence, and they scatter along the creeks and speedily take possession of any bush or bunch of reeds or grass upon the meadows, from twenty to fifty feet apart, and commence to make a round or globular nest, about the size and shape of a cocoanut, a foot or two above the ground, weaving in the long grasses in a very weaver-like manner around the standing reeds, and occasionally stopping up the interstices with mud.

The interior is lined with finer grass, feathers, or other soft substances. The opening is not visible but is concealed so nicely with grass that even a mosquito could not find its way in. The Marsh Wren, like others of the Wren family, from Sir Christopher down, have been famous as architects, and we have no nests in our collection more admired, or that show more skill than those of the Marsh Wren, woven in a group of cat-tails. I am informed that an occasional nest is found in the overhanging branches of trees, but have never met with such. Their second nests are built among the full-grown reeds, and a nest with a few cat-tails woven in and standing out from the top is quite a curious affair. The eggs are very small, pretty uniform in size and shape, but varying much in color, from a blueish white ground to a dark chocolate color, and more or less blotched. The eggs in one nest are generally nearly alike in color, although we occasionally find some very dissimilar in the same nest. The number varies from four to six. In hundreds of nests I have never found the latter number exceeded, averaging five.

Jan. 1883.]

AND O

The birds themselves are brown and white, of various shadings, and their little short tails are raised over their backs. Sometimes old nests are found occupied, but not often. They make two nests in a season. Their food consists of insects, or their chrysalis, &c., and locating as they do where the mosquitoes sometimes number 100 to the square inch, they would have no trouble in filling their crops, provided such food was desired. They do use the mosquito before its change from its chrysalis, as these are found in their stomachs. They care little for the birds of prey after the reeds have grown, as they can escape among them where the large birds cannot follow. But early in the season many fall victims to their pursuers. Were it not for this, the increase would be more than could be accommodated, even on these vast meadows. Being too insignificant to shoot, and their plumage not brilliant enough for ladies' bonnets, &c., they escape the guns of the boys. I have known a collector to obtain 400 to 500 eggs in a day, and have myself added several hundred to the stock of eggs for exchange, thus reducing the valuation of Wrens' eggs; yet I see no diminution in the numbers of the birds in the same locality. But their sharp little voices sound harshly in my ears when I think how many pairs of birds I have rendered miserable in my efforts to build up a collection of eggs.—*B. B. Haines, Elizabeth, N. J.*

O. & O. VII. Jan. 1883. p. 6-7

93. *Cistothorus palustris*. LONG-BILLED MARSH WREN.—Very numerous. Breeds abundantly in all the marshes around Washington. Dr. Coates, in his 'Birds of the Northwest,' speaks as follows on the nidification of the Marsh Wren: "The eggs, as usual, are numerous—six or eight—sometimes so many as to induce the suspicion that they were not all laid by the same bird." This is not the case. The birds around here, as a rule, are finding a large young in one nest.

Nesting of the Long-billed Marsh Wren.

Along the Delaware river, ten or twelve miles below Philadelphia, there extends a series of marshes drained by numerous ditches. These marshes are covered with the long ribbon-like cat-tail and calamus reeds, partially submerged at high tide. This is the breeding place of the Long-billed Marsh Wren (*Telmato-dytes palustris*) which we may consider as the commonest marsh-breeding bird in this vicinity.

The Marsh Wren's nest is an almost globular structure, formed by the weaving together of numbers of dead cat-tail leaves. The long diameter of the nest is about seven, and the short about five inches, in fact it is somewhat the shape of a cocoon with the outside fibrous shell intact. The entrance is a circular hole from one to one and a half inches in diameter, and situated at the side, generally two or three inches from the top, the entire structure being firmly bound to the growing reeds, out of reach of the high tides.

The eggs, four to nine in number, are of a dark chocolate color, with very minute and numerous markings of a deeper brown, distributed over the entire surface. Some, however, are almost uniform in color, and I have seen several sets in which one or two eggs, except at one end, were nearly white.

In regard to their duplicate nests, as a general rule, I found from three to five empty nests for every one occupied. Why these duplicate nests are made we do not know, some say they are built to deceive their human enemy (if man may so be called), others that the male Wren builds them to sleep in, and again that he amuses himself by building them while the female is sitting on the real nest, but whatever it is for is a problem yet to be solved. Until I found out how to distinguish them, as I think I have, the extra nests caused me a great deal of annoyance. I noticed that almost invariably the entrance to the occupied nests was lined with cat-tail or thistle down, while the unoccupied ones had none.

The song of this Wren has been described by Wilson as a crackling sound, but to me it seems more like a liquid gurgle, beginning

slowly and growing faster. This lasts for about five seconds, when there is a stop of a few moments and the music begins again.

On the near approach of anybody the bird often flies straight up in the air for about ten feet, and then descends in the same manner. This is presumably to locate the position of the intruder. The Marsh Wren, like the rest of the family, can bend its tail back until it almost touches its neck. In this position he creeps or rather seems to slide around the reeds in search of food.

J. W. Koch.
Philadelphia, Pa. O & O. XIV, Mar. 1889 p. 39

A Curious Set of Eggs of the Long-billed Marsh Wren.

While collecting eggs of the Long-billed Marsh Wren (*Telmato-dytes palustris*) a few seasons ago, I came across a set which I think is unique.

It consists of four eggs of the usual size and shape of typical Long-billed eggs, the texture of the shell also being the same. The reason I mention this fact is that eggs of the Short-billed species are much more brittle than those of the Long-billed.

The eggs are all pure white; if you hold them up to the light you can discern a few lilac spots on the large ends, which have the appearance of being under the surface of the shell; otherwise they are immaculate.

This set was found in the centre of a colony of Long-bills on a salt meadow. The nest was placed in a small bush three feet up, and was composed of the same materials as typical nests of the Long-billed; the female was seen and fully identified.

C. W. Crandall.

O & O XIV, June, 1889 p. 24

Albino Eggs of Long-billed Marsh Wren.

I thought it would be of interest to readers of ORNITHOLOGIST and OOLOGIST that on June 10, 1891, I took three sets of albino Long-billed Marsh Wren eggs. The eggs were white, without any spots whatever, and were properly identified, as several were found with the darker kind. One set of four were all pure white without any markings. I also found several nearly albino ones.

B. H. Swales.

Detroit, Mich. O & O Vol. 17, Aug. 1892 p. 121

EGGS IN A SET.—Harry F. Haines, Elizabeth, N. J., who has taken a good many Long-billed Marsh Wren's nests, writes that six is the largest number found in a nest, but five is found often, than four or six. Let us hear from others.

O & O. VII, Nov. 1882, p. 174

Resting note from Conn. June 17th
found set of six Long-billed Marsh Wrens
that were white, spotted with brown on the
large end. J. E. Hoff, Andover, Conn.
O & O. VII, Oct. 1883, p. 78

ODD SHAPED EGGS.—Delos Hatch, Oak Centre, Wis., writes us that he has this season taken a set of L. B. M. Wren measuring about .75x.50.

He finds sets of eggs have generally averaged smaller this year. O & O. IX, July, 1884, p. 90.

A Comparison of the Nesting Habits of the Long-billed and Short-billed Marsh Wren.

The Short-billed Marsh Wren (*Cistothorus stellaris*) seems to be confined to certain sections for the nesting season. I know of but two places where they are to be found in numbers, and as these places are somewhat under thirty miles from my present residence, and, so far as I know, but one other oologist besides my brother and myself knows about them, the birds are disturbed very little and consequently congregate in considerable numbers every year. The Long-bills (*C. palustris*) are common almost anywhere.

The Short-billed usually has the first nest completed and eggs laid by the last of May and the Long-bills about a week later; as at that time of the year the grass is not very long, the nest is often built so that it almost touches the hummock from which the supporting grass grows, but I have never seen them actually on or in the hummock. As a rule it is built some distance from the ground, and one, containing seven eggs, was built in the top of the bunch of the grass—the tops of the live grass being woven in and forming part of the nest.

I have noticed that while both species build in wet meadows (in this case freshwater meadows) the Long-bills invariably build in the tall rank grass and near some river or brook, while the Short-bills are equally particular in choosing a shorter and much less rank kind of grass. When the first set is laid, the grass all over the meadows is rather short and not very rank, so that the nests may be anywhere and it is nothing but pure luck when one is found; but later in the season, when most of the grass is long and rank, the Long-bills stay wherever they happen to be, while those of the other species come from all parts of the meadows, and con-

grass which is so common in every w.

Short-billed Marsh Wren has a habit of often pulling to pieces any lat has been handled, whether decoy erwise, so long as it has not begun in it, for I have repeatedly placed a few feet from the nest with the g noted, only to find the nest gone ards except for a sort of thin skelegrass.

he nest contains a set of eggs I do ink it is possible to make them deas the two following incidents will

June 1, 1892, I collected a nest con- g six eggs, but, for some reason, I t have an egg-box (I cannot under- how it happened), so I left the eggs nest and laid it, entrance up, on the lock from which it had been cut, gan to search for other nests further the marsh. In about half an hour igned, walking rather carefully in not to overlook it or step on it. is I reached the edge of the little g of trampled grass and saw the he bird jumped out of it and flew

I felt meaner for taking that nest or all the others I have taken put er. I do not know whether she have hatched the eggs or not, but ust have been on the nest for some efore being frightened away, as the vere perfectly warm.

he other case my brother found a n July 16 containing seven eggs, fishing to show it to a friend just as d, stopped the entrance with a small f grass. On July 24 he visited it and found that the top had been ed out, enlarged and lined, so as to another perfect nest just above the ne; the second compartment con- three eggs. Foolishly enough, we ; nest to see if any more eggs would l, but on visiting it two days later,

After a drive of five miles and a night's rest, on the 29th I was in trim for work, and after breakfast started out. The first thing to be was to examine the two nests my friend had found, which were both in the thicket about two hundred yards from the first nest contained four eggs of Warbler and one of the Cowbird. When it was found it contained two eggs of Warbler and the Cowbird. I did not disturb this nest as I was going to stay the next day. The second nest was a half finished, but my friend declared there had been nothing added to it. He found it, but on June 9th he took off five fresh eggs from it.

Our next find was a nest containing fresh eggs in a small thicket on edge of a wood where I never found a pair before and have been hunting over the same ground for the past ten years. This a grand surprise as I had never found a nest containing more than five eggs, but seemed as if this was my lucky day made up of surprises, for after packing six little beauties safely in my box started again and after a tramp of a mile we entered a heavy wood; after tramping through it for some distance we came to a small stream of water and a clear containing about an eighth of an acre, with a few raspberry vines scattered about.

As we entered the clear spot what our surprise to hear the notes of the Bird wing above our heads. It took us half a moment to find the nest which contained three fresh eggs. I left them and my friend secured the nest and five eggs from me on June 2d. After leaving this and tramping another half mile or more we came to an old breeding site where the past three years we have found a nest of this species. The site is a narrow strip of ground between the last furrow of a ploughed field and an old worn fence dividing the field from a large wood, covered

by a tufted grass which is so common in every meadow. The Short-billed Marsh Wren has a curious habit of often pulling to pieces any nest that has been handled, whether decoy or otherwise, so long as it has not begun laying in it, for I have repeatedly placed a stick a few feet from the nest with the bearing noted, only to find the nest gone afterwards except for a sort of thin skeleton of grass.

If the nest contains a set of eggs I do not think it is possible to make them desert, as the two following incidents will show.

On June 1, 1892, I collected a nest containing six eggs, but, for some reason, I did not have an egg-box (I cannot understand how it happened), so I left the eggs in the nest and laid it, entrance up, on the hummock from which it had been cut, and began to search for other nests further off in the marsh. In about half an hour I returned, walking rather carefully in order not to overlook it or step on it. Just as I reached the edge of the little clearing of trampled grass and saw the nest, the bird jumped out of it and flew away. I felt meaner for taking that nest than for all the others I have taken put together. I do not know whether she would have hatched the eggs or not, but she must have been on the nest for some time before being frightened away, as the eggs were perfectly warm.

In the other case my brother found a nest on July 16 containing seven eggs, and, wishing to show it to a friend just as it stood, stopped the entrance with a small plug of grass. On July 24 he visited it again and found that the top had been hollowed out, enlarged and lined, so as to make another perfect nest just above the first one; the second compartment contained three eggs. Foolishly enough, we left the nest to see if any more eggs would be laid, but on visiting it two days later,

gregate in the two places before mentioned, where the grass does not grow much over two feet in height and is not at all thick or rank. At this time of the year, with a little patience, almost any number of nests can be found.

In choosing a nesting site they (*stel-laris*) do not seem to be at all influenced by the position of the streams, as some of their nests were within ten feet of the flowing water, while others were as much as fifty yards off in the marsh, with absolutely nothing to indicate their whereabouts.

The construction of the nests seems to be as different in the two species as their location, but neither ever use any mud. The Long-bills' nest is a very bulky piece of work and is composed externally of the soft pieces of the dead, coarse grass that it finds on the hummocks where it builds, while the other uses the fine grass before described, taking the fresh green grass for the outside and the softer dead grass for the inside next to the lining, and makes a much smaller nest. This makes the nest of the latter much more difficult to find, as it is of the same color of the surrounding grass.

Both birds build from two to six decoy nests to the best of my belief, for each pair seems to have a smaller area of the marsh to themselves for building purposes, and the number of nests in each "bunch" varies between these two figures. I think that one reason for these decoy nests being built may be for convenience in the event of the first nest being robbed or destroyed, as I have taken a set of eggs from a nest and a week or so later, on going to a decoy nest close by the position of the old one, found three fresh eggs in it.

The lining materials are the same for both birds, but vary considerably, as it is in some nests of very fine grasses, others entirely of feathers, while others will be lined with the silky tufts of that variety of

tufted grass which is so common in every meadow.

On June 1, 1892, I collected a nest containing six eggs, but, for some reason, I did not have an egg-box (I cannot understand how it happened), so I left the eggs in the nest and laid it, entrance up, on the hummock from which it had been cut, and began to search for other nests further off in the marsh. In about half an hour I returned, walking rather carefully in order not to overlook it or step on it. Just as I reached the edge of the little clearing of trampled grass and saw the nest, the bird jumped out of it and flew away. I felt meaner for taking that nest than for all the others I have taken put together. I do not know whether she would have hatched the eggs or not, but she must have been on the nest for some time before being frightened away, as the eggs were perfectly warm.

In the other case my brother found a nest on July 16 containing seven eggs, and, wishing to show it to a friend just as it stood, stopped the entrance with a small plug of grass. On July 24 he visited it again and found that the top had been hollowed out, enlarged and lined, so as to make another perfect nest just above the first one; the second compartment contained three eggs. Foolishly enough, we left the nest to see if any more eggs would be laid, but on visiting it two days later,

On June 1, 1892, I collected a nest containing six eggs, but, for some reason, I did not have an egg-box (I cannot understand how it happened), so I left the eggs in the nest and laid it, entrance up, on the hummock from which it had been cut, and began to search for other nests further off in the marsh. In about half an hour I returned, walking rather carefully in order not to overlook it or step on it. Just as I reached the edge of the little clearing of trampled grass and saw the nest, the bird jumped out of it and flew away. I felt meaner for taking that nest than for all the others I have taken put together. I do not know whether she would have hatched the eggs or not, but she must have been on the nest for some time before being frightened away, as the eggs were perfectly warm.

In the other case my brother found a nest on July 16 containing seven eggs, and, wishing to show it to a friend just as it stood, stopped the entrance with a small plug of grass. On July 24 he visited it again and found that the top had been hollowed out, enlarged and lined, so as to make another perfect nest just above the first one; the second compartment contained three eggs. Foolishly enough, we left the nest to see if any more eggs would be laid, but on visiting it two days later,

the upper nest had been cleaned out by a snake, although the lower set was safe.

The Long-bill, on the contrary, is very easily offended. June 5 this year I found a nest containing three eggs and left them, wishing to take the full set a few days later. The nest was in the middle of the meadow and could not be reached without a boat, so I was not able to go to it again until June 17, when I found it deserted (the three eggs being cold and wet), although I had handled it only as long as it was absolutely necessary to ascertain the number of eggs. Although the nest was deserted, the birds were close by and as noisy as ever, and after a short search I found the second nest in a hummock hardly five feet from the one in which the first was built. This contained five eggs slightly incubated, probably the balance of the set that would have been laid in the first nest. I think the second nest was a new one and not a decoy, as otherwise I should have noticed it the first day.

Neither species, so far as I have seen, is at all particular about the points of the compass, as far as the nest entrances are concerned, for the openings are just as often on any other side as they are on the south side. There does not seem to be any rule for this, unless, possibly, that when the nest is not in the centre of the hummock the entrance is usually in the part nearest the outer edge. When on the edge of a river or brook, it faces as often away from as towards the water. The entrance is usually in the side; but in one Long-bills' nest that was built in a bunch of "cat-o-nine-tail" leaves, the nest was longer and more narrow than usual and the entrance near the top. This is an unusual case, but there did not seem to be space enough for a hole between the leaves.

The second set of the Short-bill is usually laid by the second week of July, but sometimes a week or ten days earlier. There are from five to seven eggs in this,

just as in the earlier sets. The Long-bills lay again about the first of August, but a set of four is the largest I have seen at that date. The largest set I have taken at any time contained six eggs, but that does not appear to be considered a large set.

The horizontal diameter of the Short-bills' nest is usually four inches, and the vertical four and one half; while the Long-bills', although occasionally as small as that, are more often very bulky, measuring four and one half by six inches. The entrance of the nests of both species is about three-fourths of an inch.

The eggs of both are about the same size, averaging .67 x .47. This is a larger measurement than is usually given for Short-bills' eggs, but I have measured quite a number and they do not vary much from it. Their shape is somewhat variable, some being almost exactly like a miniature Guillemot's egg, but the majority are about the shape of the average Warbler's egg, the width being equal to a little over two-thirds of the length. Some of the Long-bills' are nearly spherical, but none of the other species are of this shape.

The eggs are nearly as highly polished as those of the Woodpeckers, the Short-bills' being pure white while those of the Long-bill are light brown, usually evenly spotted over the entire surface with slightly darker dots, sometimes, however, they are very heavily marked with large blotches of dark brown, with two or three small black dots near the large end, but I have only found one set marked in this way.

The season of incubation lasts about ten days and in the second set I believe is somewhat assisted by the heat of the sun, as I have never found the bird on the nest in July, while in May and June it is not very difficult to see the grass moving slightly as they leave the nest and then to flush them a little way off.

The songs of the two birds, although

the upper nest had been cleaned out by a snake, although the lower set was safe.

The Long-bill, on the contrary, is very easily offended. June 5 this year I found a nest containing three eggs and left them, wishing to take the full set a few days later. The nest was in the middle of the meadow and could not be reached without a boat, so I was not able to go to it again until June 17, when I found it deserted (the three eggs being cold and wet), although I had handled it only as long as it was absolutely necessary to ascertain the number of eggs. Although the nest was deserted, the birds were close by and as noisy as ever, and after a short search I found the second nest in a hummock hardly five feet from the one in which the first was built. This contained five eggs slightly incubated, probably the balance of the set that would have been laid in the first nest. I think the second nest was a new one and not a decoy, as otherwise I should have noticed it the first day.

Neither species, so far as I have seen, is at all particular about the points of the compass, as far as the nest entrances are concerned, for the openings are just as often on any other side as they are on the south side. There does not seem to be any rule for this, unless, possibly, that when the nest is not in the centre of the hummock the entrance is usually in the part nearest the outer edge. When on the edge of a river or brook, it faces as often away from as towards the water. The entrance is usually in the side; but in one Long-bills' nest that was built in a bunch of "cat-o-nine-tail" leaves, the nest was longer and more narrow than usual and the entrance near the top. This is an unusual case, but there did not seem to be space enough for a hole between the leaves.

The second set of the Short-bill is usually laid by the second week of July, but sometimes a week or ten days earlier. There are from five to seven eggs in this,

just as in the earlier sets. The Long-bills lay again about the first of August, but a set of four is the largest I have seen at that date. The largest set I have taken at any time contained six eggs, but that does not appear to be considered a large set.

The horizontal diameter of the Short-bills' nest is usually four inches, and the vertical four and one half; while the Long-bills', although occasionally as small as that, are more often very bulky, measuring four and one half by six inches. The entrance of the nests of both species is about three-fourths of an inch.

The eggs of both are about the same size, averaging .67 x .47. This is a larger measurement than is usually given for Short-bills' eggs, but I have measured quite a number and they do not vary much from it. Their shape is somewhat variable, some being almost exactly like a miniature Guillemot's egg, but the majority are about the shape of the average Warbler's egg, the width being equal to a little over two-thirds of the length. Some of the Long-bills' are nearly spherical, but none of the other species are of this shape.

The eggs are nearly as highly polished as those of the Woodpeckers, the Short-bills' being pure white while those of the Long-bill are light brown, usually evenly spotted over the entire surface with slightly darker dots, sometimes, however, they are very heavily marked with large blotches of dark brown, with two or three small black dots near the large end, but I have only found one set marked in this way.

The season of incubation lasts about ten days and in the second set I believe is somewhat assisted by the heat of the sun, as I have never found the bird on the nest in July, while in May and June it is not very difficult to see the grass moving slightly as they leave the nest and then to flush them a little way off.

The songs of the two birds, although

General Notes.

Remarks on the Nest of *Cistothorus palustris*.—The nest of the Long-billed Marsh Wren is too well known to ornithologists generally to need description, but the only explanation of its globular form, which I can find, is that given by Wilson, who states: "A small hole is left two-thirds up, for entrance, the upper edge of which projects like a pent-house over the lower, to prevent the admission of rain." The inference from this and similar statements of later writers would be that the roof is built to protect the eggs from the rain. This may be partially true, but it seems strange that a species nesting at a season when violent rain-storms are least frequent should need a protection, which birds breeding earlier in the spring do not require.

But there is another danger to which the eggs of *C. palustris* are peculiarly liable, both from the character of the country in which they breed and the slenderness of the reeds which support the nest. This is the wind, which, sweeping across the exposed marshes of this Wren's summer home, often levels the rushes with the ground. I have found the reeds growing in the Quinipiack Marshes near New Haven, Conn., where large numbers of this species breed, leveled in this manner, and the attached nests turned almost at right angles to their original position. It is evident that under such conditions the eggs in an uncovered nest would fall out and be destroyed, while in many of these nests, which had the long axis almost horizontal, I found the eggs reposing in perfect safety. The upward trend of the entrance, forming the "pent-house" of Wilson, naturally decreases the liability of the eggs to fall out, even if the wind should force the side of entrance toward the earth. It therefore appears to me at least probable that the main object of this Wren in constructing its elaborate dwelling is protection from the wind rather than the rain.

It has also been my experience that the top of the nest is generally more firmly fastened to the reeds than the bottom, and in two instances I noticed among the partially leveled reeds nests whose bases swung free of all support, thus retaining their original perpendicular position. However, this may have been the result of accident rather than design.

The taking of three sets of white eggs, presumably of this species, may be of interest. They consist of four, five, and four eggs, and were taken on June 24, July 11, and July 28, 1893, near the edge of a small salt-water ditch in the Quinipiack Marshes, Hamden, Conn. The nests, which are fairly typical of *C. palustris*, were not more than eight yards apart, and probably belonged to the same bird. The eggs are white, translucent when taken, irregular in shape, and several have small, roughened projections on the shell. One from the set of five has a few dark spots half concealed beneath the surface of the shell and most perceptible in holding the egg to the light.

C. palustris is the only Wren known to inhabit this marsh, and a male, which I believed to be the owner of the first set, together with a Wren which settled for an instant at the entrance of the third nest, were of this species. The character of the locality, and the large numbers of the Long-billed Marsh Wrens everywhere around, made more certain identification impossible.

The white eggs of this species which have been recorded, taken in connection with the normally white eggs of its near ally, *C. stellaris*, and the frequently white eggs of the Bluebird (*Sialia sialis*) have to my mind a peculiar importance as an additional argument for the truth of the theory of protective coloration, the covering of the nest rendering the usual dark pigment unnecessary. — LOUIS B. BISHOP, M. D., *New Haven, Conn.*

[Albinistic eggs are well-known to occur more or less frequently in birds that normally lay colored or spotted eggs, and which do not breed in holes or in covered nests; just as albinism may occur in the bird itself in any species. Why, then, should abnormally pale eggs be considered as having any special significance in the two species above cited? — J. A. A.]

Nest of Long-billed Marsh Wren lined with a Snake Skin.—On June 6, 1898, on the meadow near Rutherford, New Jersey, I found a curious nest of *Cistothorus palustris*. It was fastened two feet above the water, to some green cat-tails, and was composed of reeds and broad grasses, and lined with a cast-off snake skin which was about a foot long. It contained six fresh eggs.—JOSIAH H. CLARK, *Paterson, N. J.*
Auk, XVI, July, 1899, p. 281.

676. *Long-billed Marsh Wren*. By B. B. Haines. *Ibid.*, pp. 6, 7.—
Nesting habits as observed in New Jersey. *O. & O.* Vol. VIII.

1566. *One Day on Chester Island with the Marsh Wrens*. By Harry
The Oologist. G. Parker. 'The Oologist' [continuation of 'The Young Oologist'], Vol. Ank. VII, Jan.
III, No. 1, Jan. and Feb., 1886, pp. 1-2. 1890. p. 43.

The Oologist. 1581. *Marsh Wrens*. By 'Ortyx' [=C. J. Pennock]. *Ibid.*, No. 5, Ank. VII, Jan.
Sept. to Nov., 1886, p. 58. 1890. p. 43.

Cistothorus palustris dissaepius.

A NEW LONG-BILLED MARSH WREN FROM EAST-
ERN NORTH AMERICA.

BY OUTRAM BANGS.

AT PRESENT there are confused under the name *Cistothorus palustris* (Wilson) two quite distinct birds; one, true *C. palustris*, breeding in the salt and brackish marshes of the Atlantic coast from Connecticut southward; the other inhabiting the inland fresh-water marshes and extending north to Massachusetts, Ontario and southern Manitoba. The former, a small bird, has the chin, throat and belly pure white and the breast is usually white also, though sometimes faintly clouded with pale brownish, with the rump, upper tail-coverts and scapulars dusky brown. The latter is a decidedly larger form, in which the chin, throat and belly are buffy or brownish white, the breast much more distinctly clouded with brownish and the rump, upper tail-coverts and scapulars reddish brown.

My attention was first called to the differences between these two Marsh Wrens by a series of winter specimens sent me by Mr. Arthur T. Wayne of Mount Pleasant, S. C. Familiar with the

ation in color, rare as it is, I should unhesitatingly pronounce the two birds here treated distinct species, so sharply are their habits defined, and so great is the difference in size between them.

From either of the western races, *Cistothorus palustris paludicola* Baird or *C. palustris plesius* Oberholser, the eastern forms can be told by many slight, though pretty constant characters as pointed out by Mr. Oberholser.¹

South of the range of true *C. palustris* and living under much the same conditions, the salt marsh of the coast, a very different bird — *C. griseus* Brewster — occurs. I can find no sign of intergradation between these two and most emphatically regard the latter as a distinct species. This bird breeds and is resident from the coast of South Carolina to Matanzas Inlet, Florida. At

¹ Auk, Vol. XIV, April, 1897, pp. 186-196. 'Critical Remarks on *Cistothorus palustris* (Wils.) and its Western Allies.' By Harry C. Oberholser.

Cistothorus palustris dissaepius.

350

BANGS, *A New Long-billed Marsh Wren.*

[Auk
Oct.

fresh-water bird from my earliest collecting days, I at once recognized a stranger in the little white-bellied, dark-backed form that winters in the coastal marshes of South Carolina. Since then, with the help of Mr. Wm. Brewster's large series and what other specimens could be borrowed, I have worked out the distribution of the two, and find the little white-bellied form to be peculiar to the salt marshes of the coast and the larger brownish-bellied bird to be restricted, in the breeding season, to the fresh-water marshes of the Atlantic watershed.

Certhia palustris Wilson was unequivocally based on the small white-bellied form, and the larger bird of the fresh marshes is the one in need of a name.

As with all Long-billed Marsh Wrens, there is some individual variation in color in both the eastern races; thus occasionally a bird taken in the breeding season in the salt marshes of Connecticut, or southward, will not be so white below as usual, or another will have the lower back rather redder than it ought; now and then, also, a bird from the fresh-water marshes of Massachusetts or elsewhere will slightly approach in color to true *C. palustris*; but size is an infallible test, and these slightly off color examples will always be found to agree in this respect with the more typical specimens of their own race. Were it not for this individual variation in color, rare as it is, I should unhesitatingly pronounce the two birds here treated distinct species, so sharply are their habitats defined, and so great is the difference in size between them.

From either of the western races, *Cistothorus palustris paludicola* Baird or *C. palustris plesius* Oberholser, the eastern forms can be told by many slight, though pretty constant characters as pointed out by Mr. Oberholser.¹

South of the range of true *C. palustris* and living under much the same conditions, the salt marsh of the coast, a very different bird — *C. griseus* Brewster — occurs. I can find no sign of intergradation between these two and most emphatically regard the latter as a distinct species. This bird breeds and is resident from the coast of South Carolina to Matanzas Inlet, Florida. At

¹ Auk, Vol. XIV, April, 1897, pp. 186-196. 'Critical Remarks on *Cistothorus palustris* (Wils.) and its Western Allies.' By Harry C. Oberholser.

Cistothorus palustris dissaepetus.

Vol. XIX]
1902

BANGS, *A New Long-billed Marsh Wren.*

351

St. Marys, Ga., I became very familiar with it. In early April the males were in full song and nest building had just begun, the great salt marsh teemed with them and their cheerful little songs could be heard everywhere. One peculiarity of *C. griseus* is that it sings low down in the grass wholly out of sight, whereas *C. palustris* usually sings from a high stalk in plain view above the marsh. At Mount Pleasant, S. C., *C. griseus* is the breeding form — much rarer now than formerly owing to severe storms of a few winters ago — and true *C. palustris* winters there in numbers, but in spring retires northward to breed. Mr. Wayne occasionally gets also in winter an individual or two of the new form here described, which is very easily told at this time of year from either of the others.

The two forms of Long-billed Marsh Wrens, hitherto confused under the name *Cistothorus palustris*, can, I think, be recognized by the following brief diagnoses. Care must always be taken, however, in identifying specimens, that one has properly sexed specimens, as females are much smaller than males, and wrongly sexed skins (unfortunately too frequent even when made by good collectors) are confusing. In autumnal plumage the color differences between the two races are exaggerated and thus winter and autumn specimens are easiest to tell apart. In worn mid-summer plumage the difference in the color of the back is not so noticeable, but even then the much whiter underparts of true *C. palustris* is a strong color character. The difference in size is always constant, true *C. palustris* being a much smaller bird in every way — wing, tail, tarsus and bill — than its neighbor of the fresh-water marshes.

Cistothorus (Telmatoxytes) palustris palustris (Wils.).

Type locality: Tidal marshes of the Pennsylvania rivers.¹

Distribution: Salt and brackish marshes of Atlantic coast from Con-

¹ Wilson did not give a definite type locality for his *Certhia palustris*, saying, "It arrives in Pennsylvania about the middle of May, or as soon as the reeds and a species of nymphaea, usually called splatter-docks, which grow in great luxuriance along the tide water of our rivers are sufficiently high to shelter it."

Cistothorus palustris dissaëptus.

352

BANGS, *A New Long-billed Marsh Wren.*

[Auk
Oct.

necticut southward to Maryland and Virginia; in winter to coast of South Carolina.

Characters: Size small: in ♂, wing 47 to 48 mm.; tail, 40.5 to 41.5; tarsus, 17.5 to 18; exposed culmen, 14 to 15; in ♀, wing, 43.5 to 46; tail, 35.6 to 38; tarsus, 17 to 17.5; exposed culmen, 13.5 to 14; bill slender in proportion. Pale areas of under parts—chin, throat and middle of belly—pure white, the breast usually white also, but sometimes faintly clouded with Isabella color; rump, upper tail-coverts and scapulars dusky brown—Prout's brown to mummy brown.

Cistothorus (Telmatodytes) palustris dissaëptus,
subsp. nov.

Type, from Wayland, Mass., No. 9796 coll. of E. A. and O. Bangs, adult ♂ taken May 31, 1879 by E. A. and O. Bangs.

Distribution: In the breeding season fresh-water marshes of eastern United States and parts of Canada, certainly from the Middle States north to Massachusetts, Ontario and southern Manitoba. Winters from Massachusetts southward, perhaps to eastern Mexico.

Characters: Size large: in ♂, wing 50.5 to 52; tail, 40 to 42; tarsus, 19.5 to 20.5; exposed culmen, 15 to 15.5; in ♀ wing, 48 to 49; tail, 40 to 40.5; tarsus, 18 to 19.5; exposed culmen, 14 to 15; bill stout in proportion. Pale areas of under parts—chin, throat and middle of belly—buffy white to pale wood brown, the breast usually much clouded with wood brown; rump, upper tail-coverts and scapulars reddish brown—russet to burnt umber.

According to my views of the relationships of the Long-billed Marsh Wrens, the various forms of the subgenus *Telmatodytes* should be arranged as follows.

Cistothorus palustris palustris (Wils.). Salt marshes of Atlantic coast from Connecticut to Virginia, in winter to South Carolina.

Cistothorus palustris dissaëptus Bangs. Fresh-water marshes of eastern United States and parts of Canada, breeding from Middle States to Massachusetts, Ontario and southern Manitoba, wintering from Massachusetts southward, probably to eastern Mexico.

Cistothorus palustris paludicola Baird. Pacific coast region of United States and southern British Columbia. Probably nearly non-migratory.

Cistothorus palustris plesius Oberholser. Western United States and interior British Columbia from the Sierra Nevada and Cascade Mts. to the Rocky Mts., south to southern Mexico. Probably only migratory at

Cistothorus palustris dissaepus.

Vol. XIX]
1902

WICKERSHAM, *The Sickle-billed Curlew.*

353

northern parts of its range. Probably also breeds in southern Mexico, as I have an adult ♀ taken at Jalapa April 15, 1897, by Mr. C. B. Isham.¹

Cistothorus marianæ Scott. Salt marshes of western Florida, non-migratory.

Cistothorus griseus Brewster. Salt marshes of Atlantic coast, from South Carolina to Matanzas Inlet, Fla., non-migratory.

Auk, XIX, Oct., 1902, pp. 349 - 353

find him living on open prairie land, often far from water, nesting on the uplands, stalking along over the dry prairie, sometimes bobbing up and down like a sandpiper, at others sinking his long bill, with its tender ends into the ground, first on this side and then on the other, as he draws worm after worm out of its home to sustain life in his graceful body. As evening falls he becomes restless, his hunting comes to an end, his bobbing becomes more a few winters ago — and true *C. palustris* winters there in numbers, but in spring retires northward to breed. Mr. Wayne occasionally gets also in winter an individual or two of the new form here described, which is very easily told at this time of year from either of the others.

The two forms of Long-billed Marsh Wrens, hitherto confused under the name *Cistothorus palustris*, can, I think, be recognized by the following brief diagnoses. Care must always be taken, however, in identifying specimens, that one has properly sexed specimens, as females are much smaller than males, and wrongly sexed skins (unfortunately too frequent even when made by good collectors) are confusing. In autumnal plumage the color differences between the two races are exaggerated and thus winter and autumn specimens are easiest to tell apart. In worn mid-summer plumage the difference in the color of the back is not so noticeable, but even then the much whiter underparts of true *C. palustris* is a strong color character. The difference in size is always constant, true *C. palustris* being a much smaller bird in every way — wing, tail, tarsus and bill — than its neighbor of the fresh-water marshes.

Cistothorus (Telmatorhynchus) palustris palustris (Wils.).

Type locality: Tidal marshes of the Pennsylvania rivers.¹

Distribution: Salt and brackish marshes of Atlantic coast from Con-

¹ Wilson did not give a definite type locality for his *Certhia palustris*, saying, "It arrives in Pennsylvania about the middle of May, or as soon as the reeds and a species of nymphaea, usually called splatter-docks, which grow in great luxuriance along the tide water of our rivers are sufficiently high to shelter it."

Anthus
penicillatus

Anthus pensilvanicus.

Nantucket, Mass.

1878.

On Smith's Point we found a large flock of
Sept. 28. Tit-larks feeding on the burnt ground. They were very shy
and restless but we shot five.

Anthus pensilvanicus.

1889

May

Ed. Nahant 5th 8th (Tory) 1889. Nahant 16 (Tory) 1890. R. 19 (29th 40th) 1891. R. 20 (29th 40th) 1891. Concord 13th (Tory, Maudsley) 1892.

Sept. 9th flying high over 24th 26th Concord 1892.

" 26th 27th 29th 5th 7th 10th 1891.

October 13th 15th 16th 17th 19th 21st 23rd 24th 25th 27th 29th Concord 1899.

October 11th 12th 20th 21st 22nd 23rd 24th 26th 27th 29th 30th 31st Concord 1896.

" 19th 20th 21st 22nd 23rd 24th 25th 26th 27th 28th 29th 30th Concord 1897.

" 2nd 3rd 4th 5th 6th 7th 8th 10th 16th 18th 25th 27th Concord 1898.

Oct. 8th 18th 26th 27th 29th 1891.

1st 2nd 4th 6th 7th 8th 9th 12th 14th 15th 16th 23rd 27th 30th Concord 1892.

" 27th 29th 1893.

" 12th 14th 16th 18th 20th 22nd 23rd 27th 28th 29th 30th Concord 1894.

" 7th 8th 15th 17th 18th 19th 20th 22nd 23rd 27th 28th 30th Concord 1895.

Nov. 3rd 1892.

" 7th 1893.

" 1st 2nd 3rd 12th 13th Concord 1894. a. pensilvanicus

" 13th 14th 6th 7th Concord 1895.

" 2nd 3rd 4th 5th 6th 11th 24th (at the Hall) Concord 1897.

" 1st 3rd 4th 9th 12th Concord 1898.

April

E. Bay, Sutton Rd. 18 (Tory) 24 (Tory) 1894.

1894

March

Nahant possibly identifiable 29 (Tory & Chadbourne) 1890.

*Anthus ludovicianus*1889 Mass.

May 5 Concord.:- Found a single bird in a ploughed field Later date
 below Ball's Hill near the river. It rose about 60 yds
 off and flew out of sight, piping in the usual autumn
 voice. Its breast looked very red as it passed us. I had
 a good view of it and heard its note too distinctly to
 have any doubt whatever as to its identity.

" 8 Nahant.- "This afternoon, at Nahant I found a single Titlark Later date
 and looked at him over at short range (from twenty on shore
 to forty feet) as long as I chose. I had never seen the bird
 but once before and then for a few minutes only" (Read for Jovey
 letter May 8, 1889)

1891

May 19 Revere Beach. A flock of 40 (counted) in a close-cropped, Latest
 hubbly pasture only slightly raised above the bordering spring date
 brackish marsh but at this season perfectly dry. They
 spread about over a considerable space moving at a
 slow, crouching walk and keeping perfect silence save
 now and then when one would jump up on a hillcock
 and pipe a few times as it looked keenly about.
 They were rather shy but when started surely moved
 their ground a few hundred yards and alighted.
 Twice they dropped in the marsh on an oozy
 flat where they fed in company with Least
 Sandpipers. We shot two both of which proved to
 be females. The flock then departed towards the
 west but then birds afterwards returned.

" 20 Visited the field at Revere this morning and
 found two Titlarks both of which I shot. Both
 proved to be ♀♀. One was wounded. Nothing
 but the usual autumn piping heard on either date
 The ovaries of the birds ^{inferred were} ~~disturbed~~ ^{scarcely} more ^{than in autumn}

Massachusetts.

Arcthus pensilvanicus.

1881.

Oct 27. Worcester. The middle of the meadows proved to be in excellent condition for Snipe but I could start none although I went over the ground with the help of the dog - rather thoroughly. There were more Titlarks than I remember to have seen here before, over one hundred certainly. They were scattered about and rose singly and in small parties, collecting into one great flock and whistling about for many minutes before realighting.

Anthus pensylvanicus.

Concord, Mass.

1894. Titlarks were exceptionally numerous during October and
Oct. 11. on November 3rd I saw at least seventy-five. After this only
to
Nov. 21. a few stragglers were observed, the last Nov. 13th, when I
found two birds running about over the snow (four or five
inches deep) on the river bank.

During the day the Titlarks scatter widely, a few feeding on the river marshes, but by far the greater number resorting to extensive upland fields especially such as have been freshly ploughed. At evening (a little before sunset) they begin coming to the marshes from every direction and often in great numbers. When the weather is clear and still their piping notes are heard incessantly for half an hour or more after sunset and straggling flocks of the birds are constantly passing overhead. At Ball's Hill they all seem to come from the east and north. A great many alight and spend the night in the Great Meadow but many others pass on up river to Dugan Brook meadow and beyond. They seldom alight in the smaller meadows along this river but they often pitch down on narrow belts of muddy or oozy ground on the river bank where they run about, feed and bathe before continuing the flight to the roosting ground.

Anthus pensilvanicus

1894 Mass.

October

Concord. - During this month-especially the latter half of it - Titlarks have been exceptionally numerous at Concord. Their habits are rather interesting. During the day they roam over the whole country in flocks of from ten or a dozen to one hundred or more (I counted 103 in one flock) feeding to some extent on the marshes and muddy flats along the river but chiefly in upland fields that have been freshly ploughed. Every evening about sunset or a little after they fly to the river marshes where they pass the night on the ground sometimes where the grass is tall & dense but often in mowed places or where cranberry vines grow or where there are hillocks of earth. This evening flight is very marked along the entire course of the river which they seem to follow up as a convenient pathway but they do not all assemble at one place although there are certain favored spots to which they resort ^{in large numbers} year after year, such as the Great Meadows, Dragon Moxe Meadows etc. The smaller meadows do not seem to attract them ~~at all~~.

Before going to roost they often alight on the river bank and run about near the edges of the water ~~where they~~ drink and bathe.

However large the flock it is rare to hear one of its members utter any sound when feeding but when suspicious of danger a bird will often stand erect on a little knoll or lump of mud, and give a few calls evidently to warn its companions

Habits

Arcthis pensilvanicus

1894. Mass.

October
(402)

Concord. Unlike most gregarious birds the members of a flock seldom if ever take flight together even when a gun is discharged at or a dog dashes among them. On the contrary they rise singly or in pairs or trios at intervals of a few seconds so that it is often a minute or more before they are all on wing and even after the last one seems to have departed it is common to start two or three stragglers which have lingered hidden in the grass and which rise almost under foot startling the intruder by their sudden appearance and shrill notes. Evidently they rely largely on their ^{often} protective coloring for concealment but they do not ^{really} hide themselves although they sometimes shrill ^{feared} flowers or round bumps. Usually, however, each bird in the flock as soon as it is aware of the approach of a man or dog stands erect and perfectly motionless until the moment when it takes wing or until the intruder departs. If you wish to see the birds feeding it is often necessary to wait several minutes before one of them will show. In this respect they behave very like Pectoral Sandpipers.

Titlarks fly in loose, straggling flocks the members of which are ordinarily 20 or more feet apart. Their flight is ^{shyly} undulating and rather slow and feeble. They pipe almost incessantly when on wing. This pipe is very like the flight note of the Horned Lark but weaker and rather more broken & varied. It is the only note I have ever heard the Titlark utter.

Habits

Anthus pensilvanicus.

Concord, Mass.

Perching in the branches of an elm.

1899. Titlarks were decidedly less numerous than usual owing,
Oct. 12 no doubt, to the fact that the river meadows were by far too
to
Oct. 31. dry to afford them suitable feeding or roosting grounds. On
the 17th I saw five birds perching among the branches of a
small leafless elm in company with a number of Savanna Spar-
rows. The tree stands on the river bank (at "Hunt's Pond") and
I passed in my canoe within a few yards of it getting a posi-
tively certain identification of the Titlarks. They sat
rather erect and appeared quite at their ease although they
did not wag their tails or walk along the branches. I do not
recall ever seeing this species alight in a tree before al-
though I have known it to do so on a fence or the roof of a
low building.

New Brunswick Notes ... Chamberlain.

The Titlark (*Anthus ludovicianus*) must also be added to the list of species occurring in St. John County, as numerous large flocks were seen here in October last.

BILL R.O.O. 8, Jan, 1888, p. 9.

An Ornithologist's Summer in Labrador 2,
M. Abbott Frazar.

Anthus pennsylvanicus, American Pipit. Rather common, and very tame at Cape Whittle, but not seen elsewhere. They nested exactly like the Savannah Sparrow, placing their nests on the ground in open places.

O. & O. XII, Mar. 1887, p. 35.

Birds of Toronto, Canada
by James H. Fleming,
Part II, Land Birds,
Auk, XXIV, Jan., 1907, p. 85.

269. *Anthus pensilvanicus*. AMERICAN PIPIT.—Regular migrant, not common in the spring, May 4 to 10 (May 20 at Hamilton); abundant in the fall, September 14 to November 24.

Birds of N.E. coast of Labrador
by Henry B. Bigelow.

79. *Anthus pensilvanicus*. TITLARK.—One of the most abundant birds. Characteristic, with the Horned Lark, of the most barren and wind-swept hilltops. Breeds very commonly.

Auk, XIX, Jan., 1902, p. 30.

Birds of Dead River Region, Me. F. H. C.

15. *Anthus ludovicianus*, (American Titlark). A small flock seen on the open marsh near Flagstaff pond September, 1885, is the only instance I can record of their occurrence.

(To be Continued.)

O. & O. XI, Aug. 1886, p. 115

Fall Birds of Northern Maine.
F. H. Carpenter.

American Pipit (*Anthus pensylvanicus*). A few were started from the tall grass at a "logan" while plodding up the river.

O. & O. XII, Nov. 1887 p. 183

Occurrence of the Titlark (*Anthus pensylvanicus*) in Maine, in Spring.

— On the afternoon of May 15, 1889, my brother, Mr. Ralph H. Norton, and I saw a flock of twenty-four Titlarks alight in a field of young grain, on the outskirts of Saccarappa village, which forms the west end of Westbrook. My brother shot one of these birds (a female), for my collection, whereupon the others left the vicinity.

As changes have been wrought, since that date, it seems well to be explicit about the place. This was in the field owned by Capt. Issac Quimby at a point close to Mechanic Street and about two hundred yards south of the street since accepted as Green Street.

The instance has been reported in Bulletin No. 3, University of Maine, p. 122 (Knight's Birds of Maine), but as I am not aware of another spring record for Maine, yet published, it has seemed desirable to give the particulars.—ARTHUR H. NORTON, *Museum of Natural History, Portland, Maine.*

Auk, XXIII, July, 1906, p. 341-342.

The Titlark at Portland, Maine, in Spring.—The spring record of the Titlark (*Anthus pensylvanicus*) in Maine should include a solitary bird which I saw about half past three o'clock in the afternoon of May 10, 1905, within the city limits of Portland. It passed me close at hand, constantly calling and flying low in a southwesterly direction, near the north end of St. John Street, where there are vacant lots extending to open fields.—NATHAN CLIFFORD BROWN, *Portland, Maine.*

Auk, XXIII, July, 1906, p. 342.

Notes on Maine Birds.

A propos of Dr. Coates' recent prediction* that the Titlark (*Anthus ludovicianus*) will yet be ascertained to breed occasionally along the Maine coast, is there anything but inferential evidence to indicate that it occurs there at all in spring or summer? Being known to pass through Massachusetts in spring and to occur on the island of Grand Manan† at that season, it is fair to suppose that the Titlark also touches at favorable points in Maine while en route to its breeding grounds. Nevertheless neither my own observations nor the records of other observers substantiate this hypothesis.

N. C. Brown, *Portland.*

*N. E. Bird Life, p. 104, foot note.

† See Herrick, Birds of Grand Manan, p. 6.

Bull. N. O. C., 7, July, 1882, p. 189-190.

Notes on Birds about Brandon, Vt.

Strange as it may seem, I have never taken the common Titlark (*Authus ludovicianus*) during the spring migrations, although they are usually abundant in the fall.—F. H. KNOWLTON, *Brandon, Vt.*

Bull. N. O. C., 7, Jan, 1882, p. 64

Mass. (Ipswich)

Arcturus ludovicianus

1888

Feeding on sheep pastures

Oct. 30

about a dozen on the crest of the great hill south of the Neck feeding on the closely cropped turf in company with *Otocoris*. Saw none on the marshes. As a river trip from Concord to Wayland last week (26-27th Oct) saw & heard less than a dozen in all.

Nov. 5

Several seen on Rock Meadow Belmont by Chadbourn

" 8

One at Ipswich on sheep pastures

1890

Mass. (Ipswich)

Feeding on sheep pastures. One seen on the crest of the great hill south of the Neck. Several seen on Rock Meadow Belmont by Chadbourn. One at Ipswich on sheep pastures.

Mass (Winchendon)

1887

June 25th - 26th - 2 feeding young in nest

Minotilta varia

Appearance of the Tit-lark and Black-throated Bunting in Worcester County, Mass.

On the morning of October 3d, while out collecting, I was crossing a large ploughed field in pursuit of a bird, when suddenly a flock of about twelve birds rose before me. From their note I knew they were something I had never seen before. I looked around and saw one on the ground at some distance to my left. I advanced and shot it and found it to be a Tit-lark. I looked for more but could not find any as the flock had gone.

I went on and returned in about two or three hours and found a flock of about fifteen or twenty. I shot two fine specimens before they could get out of reach. Later in the day I shot a Black-throated Bunting. This was the only one I could find.

According to Mr. C. K. Reed this is the first appearance in Worcester County, Mass. For several years ornithological notes have been taken in Fitchburg, and these birds have never been recorded before. This year, as usual, I find the Snowbirds in great numbers over a belt of about thirty miles which I have travelled, but last year there were none here except on February 5th and 6th, when three or four were reported to me. I did not see any.

The Red-bellied Nuthatches are here also; these have not been seen before for several years.

October 19th Mr. Kimball and myself saw a flock of about seventy-five Tit-larks near Lunenburg, Mass.

I. C. Greene.

O. & O. XIV, Nov. 1889 p 174

174

Anthus ludovicianus

Savoyescott, Mass.
Nov. 3, 1882

I saw a single Tit lark at Phillips Beach to day and from a plowed field near the station flushed five more which flew directly over my head. On Oct. 30 I saw two or three at the same place feeding on the beach. The present date is a late one.

Anthus ludovicianus, ^{T. Rev.} Nov. 4 E. Mass. 1884.
Anthus lud. ^{Spindle} Nov. 10¹ E. Mass. 1883.

Mass. (near Cambridge).

1885

Oct. 23¹ - 26¹ ^{land} 27¹ - 30¹⁰ (Spindle)
Nov. 5^(4th) - 8¹ (Spindle) - 15¹ (Spindle)
Anthus ludovicianus

THE TITLARK (*Anthus ludovicianus*) IN MASSACHUSETTS IN JUNE. — The occurrence of the Titlark on the coast of Massachusetts so late as the 8th of June, with just the possible suspicion that it was about to breed there, is a very interesting and characteristic fact in the history of the eccentric and abnormal habits of this species. It has been claimed to breed regularly in Central New York, though its presence there in mid-summer would seem, of itself, so improbable as to require confirmation. The example now referred to as taken on our coast was shot by Mr. Wm. A. Jeffries, on a small island off the shore, at Swampscott, on Saturday, June 8. Its mate, if it had one, could not then be found, nor any trace of a nest. We cannot be certain of its having been a mated bird, but the condition of its reproductive organs renders this supposition probable. The occurrence of this species on our coast, in the height of the breeding season, while it does not necessarily confirm that of Mr. Gilbert of Penn Yan (see Bull., III, p. 35), goes a good way to establish its eccentric and nomadic habits, and prepare us to accept as possible, irregularities that would be improbable in almost any other species. — T. M. BREWER, Boston, Mass.

Bull. N. O. C. 3, Oct., 1878, p. 194.

Winter Birds of Eastern Massachusetts.
H. X. Job.

Titlarks were an agreeable surprise on February 25, 1882, when I came close upon two as they sat perched upon a rock on Moon Island, Boston Harbor.

Bull. N. O. C. 8, July 1883, p. 150.

DISTRIBUTION OF BIRDS AS INFLUENCED BY INCREASE OF WATER AREA. — Many of the readers of the Bulletin are doubtless cognizant of the fact that the city of Boston has been engaged for several years past in the construction of extensive works on Sudbury River in Framingham, for reservoirs to contain an "additional water supply" for the city. These works were completed in 1879, and the three basins were speedily filled, embracing an aggregate area of some 600 acres, with a water line constantly varying with the varying quantities drawn for consumption, as well as from natural causes. This increase of water surface has had a noticeable effect in enlarging the Avi-fauna of the locality. Being favorably situated (rather too favorably, in one respect, one-half of my farm being now under water!) I have watched this accession to our visiting list with considerable interest and diligence, and make the following memoranda as a result.

A. Species that, so far as I can ascertain by enquiry and observation (residence of 27 years), are new to this vicinity.

1. *Anthus ludovicianus*. One obtained by self, Nov., 1879; several by others.

Bull. N. O. C. 6, April, 1881, p. 126-127.

Steam + Coasts New Eng. Bird Life.
Review by Wm Brewster.

Anthus ludovicianus. — "The manner of the Titlark's presence in New England" is decidedly not "similar to that of the Shore Lark" for, as Mr. Purdie has insisted (Bull. N. O. C., Vol. I, p. 73, Sept. 1876 and II, p. 17, Jan. 1877), the former normally occurs only as a spring and fall migrant, while the Shore Lark regularly winters. Dr. Brewer is the sole authority for the wintering of the Titlark in Massachusetts, and if there was no mistake about the instances he records they were unquestionably exceptional. The negative evidence in this case is unusually conclusive. It would not be difficult to produce a dozen reliable persons who have had many years' experience in winter collecting along the Massachusetts coast who yet have never seen a Titlark there after November. Our own experience is that the species arrives from the north about the middle of September, is at the height of its abundance during the latter part of that month and the first half of October, and wholly disappears before the close of November to reappear in April, when it is less frequently seen and apparently more irregular in its movements.

Bull. N. O. C. 6, Oct. 1881, p. 238

some additions to the List of Birds of
Bristol County, Mass.
by G. L. Phillips, Dighton, Mass.

American Titlark (*Anthus ludovicianus*). I have seen large flocks of these birds along the bank of the Taunton river.

[Note. — This species is very common and was accidentally omitted from Mr. Andros' list. — Ed.]

Birds of the Adirondack Region.
C. H. Merriam.

19. *Anthus ludovicianus* (*Gmelin*) *Licht.* TITLARK. — Occurs during the migrations.

Bull. N. O. C., 6, Oct. 1881, p. 227

A STUDY OF THE SINGING OF OUR BIRDS.

BY EUGENE P. BICKNELL.

(Continued from p. 140.)

Anthus pensilvanicus (Lath.) *Thienem.** AMERICAN TITLARK.

EVERY autumn, late in September or early in October, Titlarks appear in restless flocks, flitting about the brown fields and salt meadows, the quick double-note of many individuals sounding in agreeable consonance when the flocks are on the wing.

Before the present year I never knew them to occur in the spring, but this season they were present in large flocks through the greater part of April, first appearing on the 3d. On the afternoon of the 20th, I was quite sure I heard them sing — some short trills, sometimes broken into separate notes, certainly came from a flock of Titlarks in a large tulip tree standing alone in a wide field. Though the songs of Robins and Meadow Larks confused my hearing, before the flock took wing I heard enough to satisfy me that the Titlark does sometimes sing while it is with us on its spring migration.

* Cf. Stejneger, Auk, Vol. I., pp. 167, 168.

Auk, I, July, 1884. p 204.

Common Names of American Birds. Ingersoll.

In *Titlark* (*Anthus ludovicianus*) we again have the prefix "small." *Lark* is a condensation of two ancient words in Anglo-Saxon (*læw*, "craft," and *werca*, "a worker") which meant a worker of guile; and the etymologists tell us "the name points to some superstition which regarded the bird as of ill omen." In the Scotch form *Lavrock* or *Laverock* a near resemblance to the old Icelandic *læviriki* (meaning the same as above) is to be seen. As for *Pipit* or *Pipit Lark*, common terms, the word is derived from the same root as the verb to *peep* (like a young bird's cry) and hence a word describing its somewhat feeble chirp. In my long list of local American names for this species occur the following: *Titlark*, *Prairie Titlark*, *Lark*, *Skylark* (Dist. of Col.), *Louisiana Lark* (and many other old book-names); *Brown Lark*, *Red Lark*; *Wagtail*, *American Pipit*, *Alouette Pipé*, etc., etc.

Bull. N. O. C. 3, April 1888, p. 78.

Do Birds change their Habits.

H. R. Taylor. *Alameda. Cal.*

While noting the absence of shore birds, I saw a bird, not much larger than the little Sandpiper, trotting along by the waves and picking up its dinner like a veritable snipe. Soon I saw others similarly employed, and further on, a large flock gaily deporting themselves on the beach. The birds were American Titlarks, which are very common here in the winter.

We have several marsh sparrows that make their habitual abode within the province of the water birds, but the sight of the Titlark, which we have become accustomed to think of only in connection with birds of the field, associating in an entirely reckless manner with common sandpipers close by the fishy sea, seemed to me strikingly singular.

Q. & C. X111 Feb. 1888. p. 32.

July 25, a friend told me he had found a nest on the ground with four pretty, dark-colored eggs. He was going to take them up for me, "but the old bird fluttered around and felt so bad," that he didn't. To-day I got him to go with me to the nest, and, alas! no eggs, but four chicks instead. As I expected, it was a Pipit or American Titlark. I took the nest, substituting a handful of dry grass. It is entirely of dry grass, lined with fine, wiry grass. Outer diameter, five inches; height, two inches; inner diameter, two and one-half inches; depth, one and one quarter inches.

O. & C. IX, Jan. 1888, p. 16

*Alameda, Calif.
D. D. Brewer*

Natural History

Am. Field XVII, no. 2, July 9, 1874, p. 33

American Pipit.—Tit-Lark.—(*Anthus ludovicianus*.)

BY W. A. STANNIS.

HAVING been during the past year on a collecting expedition to the coast of Labrador, it was my good fortune to become so intimate with this bird that a short account of it may be of interest. The tit-lark is an abundant summer resident, and breeds all along the coast of Labrador from Mingan to Red Bay, a distance of over five hundred miles, and is always a familiar, well-known and pleasing singer. I first became acquainted with it as an abundant, or at least more than common resident at both Old Fort and Bonne Esperance Islands. These first two places are not more than eight miles apart, and I then thought it probable that all the islands about that part of the coast were equally abundant breeding places, as I have found out that they are. On the 7th of May I started on a trip up the coast, and arrived at Mingan on the 29th; the next day I saw the tit-lark for the first time, and afterward I found it on nearly all the islands and places visited. Being absent during the egg-laying season, I missed the eggs and nest, though I am informed that it breeds abundantly, and the boys and people along the coast recognized the bird everywhere.

The name by which the pipit is known in Labrador is that of wagtail, the spotted sandpiper being the only other bird that I know of that thus dips its tail and is here found on the coast; this latter has the name of crooked winged bird. I could find no other bird that had a similar name of wagtail. The first specimen I shot was a young bird, and after I became familiar with the species, I would often spend the best part of an hour in watching the bird as it stood in some obscure corner of the yard pluming itself and resting, or slowly walking from place to place before finally taking wing.

The young bird seems much larger than the adult, at least by impression, if not by actual measurement. I have often mistaken it for the young of *eremophila cornuta*, which at a little distance it much resembles; but I could invariably detect the difference. Among other differences the shore-lark hops, while the pipit walks. It was impossible to mistake the full-grown bird, whose sleek, cunning appearance, as you came near it, struck you at once. The bird is here called the wagtail, and it possesses that peculiarity of so many, or rather so few of our species, of dipping and waving the tail when at rest, whence the name. On perching, the bird immediately begins this movement, as if to secure a proper balance or equilibrium. The movement is generally a dipping of the whole hind part of the body, either straight up and down, or diagonally, so it thus often gives the appearance of waving the tail from side to side; this I have never seen the bird do. After fairly balancing itself the waving motion ceases, and the bird sits for a time with the tail pointing in a straight line with the rest of the body. I have carefully watched these movements, time and again, and am thoroughly convinced that this wagging motion is not a normal condition of the body, but simply a means of acquiring the normal resting position, and due to some peculiarity in the body structure itself. I have seen the bird hold the tail downward at a slight angle with the body, as do most fly-catchers and such like species; the head is inclined upward and the neck drawn in. After a short time the bird will become sprightly again and prepare to fly off. I have sometimes seen it dip the tail without moving the rest of the body, but this is less frequent than the other movement.

It will often allow me, especially should it be a young bird, to come within a few feet even of where it is feeding without taking wing, nor do I think this is caused from the fact of its being a young bird since the old ones have allowed the same privilege, though less often.

The walking movement is a rather short (at least not long) step, and while busy picking up food (which in all cases examined, and I have dissected the gizzards of a good many, appears to be insects especially of the coleopterous kind, judging from the legs and antennae of which there were always numerous fresh remains); it looks about sharply, occasionally glancing at the intruder, while picking here and there among the rubbish on the ground.

The old bird, though very tame, is less easily approached, and much more cunning and mouse-like, if I may use the term, than the young. On approaching, it walks or runs along to near some sheltered tuft of grass or concealed place, and crouching, draws in and down its head, lowers its tail (of course the center of the back is thus somewhat raised so that the outline of the bird forms an obtuse angle), and either creeps away or remains perfectly still, as it regards the situation more or less dangerous. I have watched it in a like position for some ten or fifteen minutes at the very least, while it is almost safe to say half an hour—at least until I was myself tired of watching longer—without its making an apparent movement; when tired of watching I moved, and the bird then flew off with a wild, irregular, low, but slowly rising flight, tipping from side to side as do many of the sandpipers. When the flight is for a short distance only, it seems to be rather undulating. I have often seen the old bird rise in a series of irregular spirals to quite a height, when it would seem to flutter or substatin itself by a series

of trembling flutterings, only to soon dart off to the right or left, and descend a short distance as if to alight, but instead of so doing continue its flutterings, and presently dart off again in some new direction. Conceiving at first that this might be owing to some bewilderment, I arose from my crouching position; all the time I was standing the bird continued these wild, irregular movements; almost the moment I again crouched, the bird descended and alit. I tried this experiment several times, and almost always with the same result. The bird remained standing, the more irregular were the movements, the further directly after being flushed, while, if I crouched at the instant of flushing, it immediately lit at a short distance only from its former place. If this proves anything, it seems to incline to the fact that the bird at this season of the year, at least, is not partial to long flights. It may be said that the bird would not naturally fly high or long in the height of the breeding season, yet I have seen it extend its flight to a very long and high flight, to its own apparent delight and preference, in the midst of its breeding season. While in these giddy flights the pipit seldom utters a note, except an occasional sound which approaches more to the attempt to whistle, on a medium but not too shrill key, the word wheep; this is repeated once, twice, or even three times in rather slow succession. This same sound is uttered as the bird flies about from place to place, but generally, so far as my observation goes (except when on the wing or frightened into a forced flight), it usually picks up its food.

The young fellows, about the several places visited, recognized the bird, and tell me that it builds its nest in a low tree, against the trunk, or some large, stout limb of a small tree; that it is made of mud, plastered with grasses, much like a robin's, and that the eggs are "smaller than any other egg we ever saw." I offered a small fortune, in the eyes of a Labradorian, for a nest and eggs, or simply a nest of the pipit, but was too late in the season. I have many promises for next year, which I have no doubt will be fulfilled. The bird appears so common in certain localities, that I have often seen over a dozen, by actual count, all within a few yards of me, both young and old, hopping about and feeding with as much apparent unconcern as if they were not aware of my presence.

Of seven specimens measured and examined the following account may be given:

No. 1. Length, 6.75; extent, 10.50; wing, 5.50; tail, 2.50; bill, .45. General color, ashy brown, with a decided slate blue tint above; quills, brownish black, whitish edged; no distinct wing bars; secondaries, whitish edged, like the quills; tail more nearly black, outer feathers white, except on the upper inner four-fifths; next pair, barely touched with white on the outer edge; tail coverts, barely light coffee tinge; breast, pale coffee, thickly speckled with brownish black. No. 3. Length, 6.85; extent, 10.50; wing, 5.50; tail, 2.55; bill, .50. Colors, similar to No. 1, a clear brown beneath, and a few streaks of brown on the breast. No. 3. Length, 6.90; extent, 10.30; wing, 5.35; tail, 2.20; bill, .48. Very similar, still browner beneath, and more spotted than either No. 1 or No. 3. The feathers above, dark centered. A young bird (young Tt) looked nearly pure slate blue; buffy brown beneath, lighter on the sides; under tail coverts white; deep buffy on throat and upper breast, more or less speckled in a long narrow streak, each side of the throat, by black centered spots of an oblong arrow shape in the center of each feather. No. 4. Length, 6.50; extent, 10.40; wing, 5.3; tail, 2.20; bill, .48; tarsus, .85; middle toe and claw, .83; hind toe and claw, .75; hind claw, .38. Upper throat and chin with an evenly defined, yellowish white, unspotted area. The two maxillary streaks of spots extending downward on either side, evenly and equidistant from top to bottom. Upper breast and lower throat spotted with the same color as the back, in inverted triangular points (the apex toward the throat), ending the center of each feather. All the other lower parts buffy white; under tail coverts white; sides beneath wings more or less lighter than back, and streaked with longish streaks of dark centered feathers. Quills dark brown, light edged (not white, and with no white bars). Back with feathers barely black, centered; crown more distinct, and with closer pattern of the same dark centered feathers. Above greyish blue slate; the white of eye and posterior part of cheek a dull buffy tint. No. 5. Length, 6.50; extent, 10.50; wing, 5.45; tail, 2.45; bill, .48; tarsus, .85; middle toe and claw, .80; hind toe and claw, .75; claw, .43. Similar in color to the others, but with the throat white, breast more buffy, spots quite black, and much more thickly scattered, deced and longer; white of eye and posterior cheek pure; the maxillary line hardly reaching to chin, and very faint. No. 6. Length, 6.40; extent, 10.15; wing, 5.40; tail, 2.35; bill, .48; tarsus, .92; middle toe and claw, .80; hind toe and claw, .75; claw, .36; deep buff on breast, closely spotted, white about the eye and cheek. No. 7. Length, 7.00; extent, 11.50; wing, 5.70; tail, 2.60; bill, .50; tarsus, .90; middle toe and claw, .85; hind toe and claw, .70; claw, .30; and in decided fall summer best. Whitish, spots larger and more decided on a scarcely buff ground, yet with rather worn looking plumage.

All these specimens had their gizzards quite extended with legs and antennae of beetles, intermixed with gravel stones of a small size. The bird would often act as if the nest were very near by, though I hunted in vain for it. I saw several young birds just able, apparently, to take their first flight. The colors upon them did not differ from those upon their parents.

The pipit breeds abundantly all along the Labrador coast, but seldom appears far south of the Canada line.

Amherst, Mass.

II. ON THE EARLIEST AVAILABLE NAME OF THE AMERICAN
TITLARK.

I am sorry to be obliged to claim that the appellation *Anthus ludovicannus* (Gm.) is more recent than *Anthus pensilvanicus* (Lath.).

Linnaeus did not include the American Titlark in any of the original editions of his 'Systema Naturæ,' although it was both described and figured by earlier authors, viz., G. Edwards, who in his 'Gleanings of Natural History' gave on plate 297 a recognizable figure of a 'Lark' which was sent him from Pennsylvania by Mr. W. Bartram; and upon his plate and description is based Brisson's 'L'alouette de Pensylvanie' (Orn., VI, App., p. 94, No. 13). The 'Red Lark,' No. 140 of the 'British Zoology,' is said to be based on the same. Under the name 'Alouette aux joues brunes de Pensylvanie' Buffon, in 1778 (Hist. Nat. d. Ois., V, p. 58), repeated the description and quoted the plate, but also described (p. 38) a specimen of the same species from Louisiana as 'La Farlouzanne.' Latham, in 1783 (Gen. Synops. of Birds, Vol. II, pt. 2, p. 376), reprints these descriptions, the former as '7. Louisiane Lark,' and the latter as '8. Red Lark,' besides quoting under each heading the synonyms as given above. A reprint of the description of the 'Red Lark' is found in Pennant's 'Arctic Zoology,' II, p. 393 (1785). So far neither of the two alleged species had received any Latin name in accordance with the Linnaean binomial system (on Edward's plate, and in the text of Brisson, it was, however, named *Alda pensilvanica*); but in 1787 Latham gave the 'Red Lark' the binomial name *Alda pensilvanica*. It is the general notion that Latham did not use binomials in the Linnaean sense before he employed them in his 'Index Ornithologicus,' published in 1790, two years after Gmelin's 'Systema Naturæ'; but in the 'Supplement to the General Synopsis of Birds' (London, 1787) he gives, on p. 281 *et seq.*, 'A List of the Birds of Great Britain,' and in this list he for the first time applied binomials, coining new names for those which had not previously received such in Linnaeus's 'Systema Naturæ.' The new names given by Latham are printed in italics, and reference is given to the descriptions in the 'Synopsis,' the 'Supplement,' and the 'British Zoology.' On p. 287, under 'Genus XXXIX,' we find, as one of "the more rare [British] Birds": "[Red Lark]. Synopsis, IV, p. 376. Br. Zool. I, No. 140. *Alda pensilvanica*"; and in a footnote he thus explains the appearance of this species in a list of British Birds: "Now and then met with in the neighbourhood of London;* but more common in America."

It was in 1788 that Gmelin (Syst. Nat., I, p. 173) first applied the name *Alda ludoviciana* to the 'Farlouzanne' of Buffon, while he, on the following page, bestowed *Alda rubra* upon the 'Red Lark,' the bird of Edwards's plate. Gmelin knew nothing whatever of these birds, aside from the descriptions quoted above, and his diagnoses are wholly made-up from them.

These early synonyms may be cited as follows:—

Alda pensilvanica, EDW. Glean. pl. 297.

L'alouette de Pensylvanie, BRISS. Orn. VI, App. p. 94, No. 13.

Red Lark, PENN. Brit. Zool. No. 140.

Alouette aux joues brunes de Pensylvanie, BUFF. Hist. Nat. Ois. V, p. 58.

La Farlouzanne, BUFF. *ibid.* p. 38.

Red Lark, PENN. Arct. Zool. II, p. 393, No. 279.

Louisiane Lark, LATH. Syn. II, 2, p. 376, No. 7.

Red Lark, LATH. *ibid.* p. 376, No. 8.

1787.—*Red Lark, Alda pensilvanica* LATH. Synops. Suppl. I, p. 287.

1788.—*Alda ludoviciana* GMEL. Syst. Nat. I, 2, p. 793.

1788.—*Alda rubra* GMEL. *ibid.*, p. 794.

1847.—*Anthus pensilvanicus*, THIENEMANN, Rhea, II, (p. 171).

The American Titlark will therefore stand as

Anthus pensilvanicus (LATH.) THIENEM.

* Instances of its capture in Europe of later years are not very frequent. See Dalglish, Bull. Nutt. Orn. Cl., 1880, p. 69.

Modiola
varia

Miniotilta varia

1889 Mass.

May 10 Cambridge.— Several in the white willow on Dr. Hyman's place, others migrants in white willows and maples in the Maple Swamp, at the in white former locality in company with two Parulas, at the latter with willows. D. virens et coronata. The ♂♂ singing freely. Evidently all these individuals were migrants merely tarrying to rest and feed before resuming their journey northward.

" 17 Concord.— Abundant everywhere in extensive woods. This species Song has two distinct songs and several variations of each. One song is a simple, monotonous tree, tree, tree, tree all on the same key and with little of the peculiar wiriness of tone that characterizes the other and longer as well as more varied song. The latter frequently includes a short warble.

" 29 Watertown.— A ♂ in full song in the woods on Francis Hill. I On the think he must have a mate & nest there although Coolidge farm several migrating Warblers such as D. striata, D. carolinensis & Parula were singing in the vicinity at the same time. (This bird must have been migrating ^{or at least, wandering about,} as I spent an hour or more on this hill on the 31st and again on June 4, without seeing or hearing him.

July 24 Cambridge.— An adult ♂, in full autumnal plumage, in my garden showing that the migration has begun. Last night I heard the piping of Warblers passing overhead for the first time this season.

Miniotilta varia.

Concord, Mass.

1893

April 24.

May 22.

(No 4)

A pair of Chipping (Miniotilta varia) have spent the greater part of yesterday and to-day in or beneath the small black oak which stands at the S. E. corner of the cabin. The female is on the ground much of the time, hopping about like a sparrow, apparently feeding but ^{one} confining her attention to a few eggs just a twofold, while she has worked back and forth most persistently. She is abundantly tame allowing me to get within a yard or less. Once I nearly stepped on her before she flew. She and her mate call to each other very half minute or less uttering a low chirp curiously like that of Cuckoo. What the attraction she seeks furnishes I cannot imagine.

(As I am writing this (May 23) the female Chipping has just alighted on the side of the cabin and is climbing up the logs that form the wall externally used for insects. Now I hear her hopping about ^{on} ^{the} ^{logs} ^{on} ^{my} ^{back.})

Mniotilta varia

1896. Penobscot Bay, Maine.

Deer Island. June 24th

Brooksville. June 16. A ♂ singing lustily (the raucous midsummer song)
on oak & birch second-growth of a steep, rocky slope
on the shore of Walker Pond.

Minotella varia.

1897 : mass.
March Framingham.

Framingham, Mass. close to the highway.

We watched the bird for some little time or all he could get and is positive it was no other than the Best and white-coupled. He has followed the birds with the wings for 4 or 5 years and never makes a record without good authority.

The third of I can gather no satisfactory evidence.

Truly Yours.

H. D. Eastman,
Framingham, Mass.

Saturday,

April 17, 97.

Dear Mr. Brewster:-

The following is all the information I am able to glean of the occurrence of the Black and White-coupled in Framingham.

Thursday May 13th: Was first seen by a son of Mr. Ernest Buckley, a young man 17 or 18 years old. The bird was first seen ~~by~~ on a woodpile near the house, at which flew to a small elm close to the building where it stayed for some time. The boy has been brought up under his father's instruction, who is better posted on the common birds and their habits than any one here in Fram. The second time was Sunday, May 21, by Mr. Smith when on his way to church. He was attracted by the note first and then hunted the bird up which was on a large elm

H. D. Eastman,
Framingham, Mass.

Minutilla var.

Framingham Mar 28
Yours recd. I interviewed
Eastman yesterday, & he is going
to interview the 3 parties, & at some time
Bob Waddle, & report to you.
(It seems he was not one of them)
I consider them all reliable;
& altho the extreme localities
are a mile or so apart, in a
triangle so to speak, I "reckon"
they all saw the same bird, or s.
one that had wintered here -
I failed to get one point, i.e.
did they all see him same day.
Prob. I will ascertain that.
I am awaiting Morse's list
on the internet. He seemed to be
bound to have it as near ^{perfect} complete
as possible - Very truly yours
H. D. E.

Place.
first seen
Mar 18

Miss Doyle.
Doubtful record.
Saturday
Mar 20

one 1/2
mile
Mr Smiths
Sunday. Mar 21.

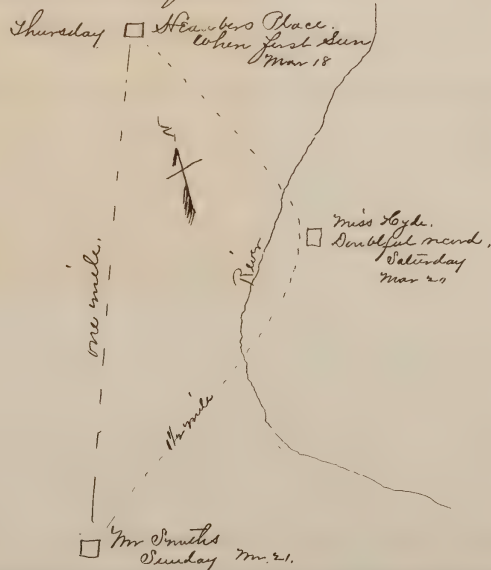
H. D. Eastman,
Framingham, Mass.

Ministola, Ore.

May 5. 1897.

Dear Mr. Brewster:

Yours received some time ago and should have been answered earlier but have been pulling Lusy. Please pardon delay. I am inclined to think it the same bird, others doubt it. Location is as follows.



POSTAL CARD - ONE CENT.

United States American

THIS SIDE IS FOR THE ADDRESS ONLY.



Mr William Brewster

145 Sprague St

Cambridge

Mass

Wood and Wilsons Thrush, Redstart.

Yellow-winged Sparrows and Canada W.
seen this morning. Warbling Vireo and
Chestnut sided Saturday. Kingbird Sunday
looking pretty well. Catbird Monday.

Sincerely Yours

H. W. Eastman,

Mniotilta varia.

Concord, Mass.

Nest and four eggs.

1898. We found this forenoon in a walk (from the cabin) a

June 5. Black and White Creeper's nest with four slightly incubated eggs. " " " " The nest was on a hillside within a few feet of a path, under the spreading branches of a solitary pine deeply sunk in the ground among the stems of some low blueberry bushes. It was about two yards from the trunk of the pine. The female came running out of the bushes as we brushed past and tumbled about, as if badly wounded, in the middle of the path. The pine stands in an opening with no other tree very near it.

June 7. Spent the forenoon photographing birds' nests exposing plates on " " " " " the Creeper's under the white pine. The Creeper sat perfectly motionless and we left her on the nest without having once disturbed her.

June 12. Visiting the Creeper's nest this morning I found that the eggs had not only hatched but that the young were already quite large and covered with dark-colored pin feathers. The female was absent.

Peterborough, New Hampshire.

1898.
July 5 to Aug. 15. Common. Young on wing July 7th.

Birds of Upper St. John.
Batchelder.

14. *Mniotilta varia* (Linn.) Vieill. BLACK-AND-WHITE CREEPER.—
We saw several at Fort Fairfield. Not seen at Grand Falls.

Bull, N. O. O., 7, April, 1882, p. 109

Last Dates Migratory Birds observed by
E. D. Wintle, Fall 1886, Montreal, Can.

Aug²². Black-and-White Creeper. [et.]

O. & O. XI, Mar. 1886, p. 44.

Summer Birds of Bras D'Or Region
Cape Breton Id., N. S. J. Dwight, Jr.

47. *Mniotilta varia*.

Auk, 4, Jan., 1887. p. 16

Summer Birds of Sudbury, Ont.—
E. H. Alberger.

630. Black and White Creeper. Tolerably
common.

Aug. 27, June, 1890, p. 88

Dwight, Summer Birds of
Prince Edward Island,

Mniotilta varia. BLACK-AND-WHITE WARBLER.—Occasionally seen or
its 'wiry' song heard, though not very common.

Auk X, Jan. 1893. p. 13

Summer Birds of the Cobalt Mining Region,
Nipissing District, Ontario.
by Frederick C. Hubel. Auk, xxiv, Jan. 1907, p. 57.

52. *Mniotilta varia*. BLACK AND WHITE WARBLER.—Once met
with, August 7.

Birds of Toronto, Canada,
by James H. Fleming.

Part II, Land Birds.

Auk, xxv Jan., 1907, p. 83.

240. *Mniotilta varia*. BLACK AND WHITE WARBLER.—Abundant
migrant, April 25 to May 24, and August 28 to September 26; rare summer
resident, breeds.

Some Ornithological Explorations in
the Dead River Region of Maine.

BY F. H. CARPENTER.

(Continued from Page 113.)

16. *Mniotilta varia*, (Black-and-White Creeper).
The only individuals of this species were a few
observed in a maple orchard at New Vineyard in
the latter part of August. They were at the time
evidently migrating.

O. & O. XI. Sep. 1886. p. 129

Some Ornithological Explorations in
the Dead River Region of Maine.

636. Black and White Warbler. Abundant
at Camden, and common at Boothbay. This
is a bird of the woods.

O. & O. XI. Sep. 1886. p. 131

Mniotilta varia, Profile House, N. H. Aug. 1865.

Bds. Obs. in Franconia, N. H. June 11-21
'86, and June 4-Aug. 1, '87, W. Faxon

55. *Mniotilta varia*. BLACK-AND-WHITE WARBLER.—Not common.

Auk, V. April, 1888. p. 152

Birds Obsd. near Holderness, N. H.
June 4-12, '85, and 4-11, '86, W. Faxon

45. *Mniotilta varia*. BLACK-AND-WHITE CREEPER.—Common.

Auk, V. April, 1888. p. 150

Birds Obs. at Bridgewater, N. H.
July 12-Sept. 4, 1883. F. H. Allen

Mniotilta varia.—Quite common.

Auk, VI. Jan., 1889. p. 77

Mt. Kearsarge, N. H. The 100
F. A. Bates

June 24.

On again down the mountain, and at the foot we pause again to look at the nest of a Black and White Warbler, which my friend had found some days before, and left for my delectation. It was on the side of a little bank, the foot of which was washed by the waters of the brook, and crowned by a fence whose gray and moss-grown boards contrasted yell with the green bank overgrown by ferns and bushes and shadowed by the dark, overhanging branches of a hemlock.

The nest was nearly at the foot of a tree, about four feet above the water, and hidden by a branch of hemlock which grew out over it. It was loosely constructed of pine needles and dead leaves, and lined with fine shreds of birch bark and horse hair; contained four eggs.

O. & O. 15. Nov. 1890. p. 172-2

Bridgewater, N. H.

June 17, 19, 21, 23, 25, 27, 29, 31, 1885

Bridgewater, N. H.

June 17, 19, 21, 23, 25, 27, 29, 31, 1885

June 17, 19, 21, 23, 25, 27, 29, 31, 1885

June 17, 19, 21, 23, 25, 27, 29, 31, 1885

June 17, 19, 21, 23, 25, 27, 29, 31, 1885

June 17, 19, 21, 23, 25, 27, 29, 31, 1885

June 17, 19, 21, 23, 25, 27, 29, 31, 1885

56. * *Mniotilta varia*. BLACK-AND-WHITE WARBLER. — Common.

* See Mrs. Carrie E. Straw of Stone, Ut.

1884

- Aug. 15. Two in company with a Yellow Warbler in our lindens (Cambridge). They looked like young birds.
- " 16 Heard one sing in same place in rather disconnected notes.
- " 17 One singing at intervals all the morning in our lindens, at times in rather low, whispering tones but its song was finished & complete. I had a good view of it & it looked like a young bird.
- " 20 Shot a young ♂ in nearly perfect fall dress

E. Mass. 1885. ^{1885. 4} 1885. 4
 46. *Miniotitta varia*. - June 16, July 17
 Princeton & No. Rutland, Mass. June, 18-1886.

7. *Miniotitta varia*. - Gerrard.

Winchendon, Mass. June, 1883.

Miniotitta 12² - 13² - 15² - 16² - 17²

Falmouth, Mass. 1889.

27. *Miniotitta varia* July 14² - 18²

Miniotitta varia Mass. - near Cambridge.

1886 April 24²

Mass. (near Concord).

1887

May 8² - 9¹⁰ - 10⁶ - 11⁸ - 12¹⁰ - 16¹⁰ - 21⁴ - 23⁸ - 25² - 26⁸

June 3⁶ - 4⁴ - 7³ - 17⁸

July 9⁶ - 10⁸ - 11⁸ - 12⁸ - 13⁸ - 14⁸ - 17²

Aug. 4⁸ - 5⁸ - 9¹⁰ - 10²⁰ - 13¹⁰ - 14⁴ - 17²

Miniotitta varia

9. singing

Mass. (near Cambridge).

1888

APR 28¹

Miniotitta varia

It was with a few yellow feathers
in white socks on a bill-top.

(Cotley farm, Watkinson)

Aug. 23. Then in pine & cedar

woods (Watkinson)

" 25. Found the woods on the
Cotley farm (Watkinson) without

being seen.

Sept. 1. Saw three (Watkinson)

" 2 " four "

" 6 " one and others (")

46. *Miniotitta varia*. - E. Mass. 1883.4. June 16, July 17

7. *Miniotitta varia*. - Princeton & No. Rutland, Mass. June, 18-1883.

Winchendon, Mass. June, 1883.

12² - 13² - 15² - 16² - 17²

Falmouth, Mass. 1889.

17. *Miniotitta varia*. - July 18 - 28

Miniotitta varia

Mass. - near Cambridge.

1886 April 24²

Mass. (near Concord).

1887

May 8² - 9¹⁰ - 10² - 11² - 12¹⁰ - 16¹⁰ - 21² - 23² - 25² - 26²

June 2² - 4² - 7³ - 17²

July 9² (young)

Aug. 4² - 5² - 9¹⁰ - 10²⁰ - 13¹⁰ - 14² - 17²

Miniotitta varia

? Aug. 19

Mass. (near Cambridge).

1888

APR 28²

Miniotitta varia

H. Townsend June 25. Brood of young with parent in maple on main street
of Chap
July. Not very common; several on all potatoes. In many fields
during one day

Birds Known to Pass Breeding Season
nr. Winchendon, Mass. Wm. Brewster

58. *Mniotilta varia*.

Auk, V, Oct., 1888. p. 389

1888 Black & White Warbler S. W. Denton.
May 6. Quite abundant shot two ♂s 24
at 11. Saw a pair on Durants' Hill. think
they will nest if they have not already.
May 13. Saw several, seemed to be paired.
at 14 saw more than a dozen chasing
each other, at times making a great fuss.
May 23. Have watched several different pairs
in different places but have not been able
to find a nest or to see them nest building.
June Black & White Creeping Warbler Wellesley, Mass.
June 4. nest 4 eggs. 6. nest 5 eggs. 27.

S. W. Denton.

Fall Migration, Bristol County, Mass. 28.
1885, Charles H. Andros.

Sept. 4. Black-and-White
Creeping Warblers are common. This brings to
mind the fact that a female of ~~this~~ ^{the same} species
was seen on the side of our house Aug. 7th, where
it had hopped from a spreading horsechestnut.
This seems rather confidential for a bird which,
though not strictly woodland, yet does not often
venture into our populous cities. O. & O. XI. Jan. 1886. p. /

Birds of Bristol County, Mass.
F. W. Andros.

Mniotilta varia (Linn.), Black and White
Warbler. Summer resident, common. Breeds.

O. & O. XII. Sept. 1887 p. 140

W. Middlesex Co. Mass.
June 25-30, 1889.

Mniotilta varia 17

Mniotilta varia from 25. Young with parents in maple on main street
of village.
Not very common; several on 25th. Notation. In many fields
during one day.

Birds Known to Pass Breeding Season
nr. Winchendon, Mass. Wm. Brewster

20.

58. *Mniotilta varia*.

Auk, V, Oct., 1888, p. 369

don't believe it is time for them to nest
yet
May 25 I see these birds nearly every time
I go out but never with any thing like
bills to lead me to conclude that they have
a nest. Bob Fitzgerald reports finding a nest
with one egg.

Mniotilta varia + *Mniotilta varia* at Wellesley, Mass.
June 4. nest + eggs. 5. nest 5 eggs. 27.

S. W. Denton.

Fall Migration, Bristol County, Mass. 28.
1885, Charles H. Andros.

Sept. 4. Black-and-White
Creeping Warblers are common. This brings to
mind the fact that a female of the ~~same~~ species
was seen on the side of our house Aug. 7th, where
it had hopped from a spreading horsechestnut.
This seems rather confidential for a bird which,
though not strictly woodland, yet does not often
venture into our populous cities. O. & O. XI. Jan. 1886, p. /

Birds of Bristol County, Mass.
F. W. Andros.

Mniotilta varia (Linn.), Black and White
Warbler. Summer resident, common. Breeds.

O. & O. XII. Sept. 1887 p. 140

25.
Bds. Obs. near Graylock Mt. Berkshire
Co. Mass. June 28-July 16. W. Faxon

48. *Mniotilta varia*. BLACK-AND-WHITE WARBLER.—Not uncommon
at lower levels. Not noted above about 2000 feet.

Auk, VI. April, 1889, p. 102

Bds. Obs. near Sheffield, Berkshire
Co., Mass. June 17-26, '88. W. Faxon

54. *Mniotilta varia*. BLACK-AND-WHITE WARBLER.—Common.

Auk, VI. Jan., 1889, p. 45

Auk, XIV, July, 1897, p. 326.

Bird Notes from Massachusetts.—*Mniotilta varia*.—On the 15th of
December, 1895, a single individual of this species was seen among the
pear trees in the yard. A heavy snow-storm was raging at the time, but
the bird was actively engaged clambering about on the trunks, on the
sheltered sides of the trees, where the damp snow did not cling. This
bird may have been the same one, seen in the same spot November 13, in
company with a flock of Chickadees. On both occasions the bird was
very tame and confiding, allowing me to approach near enough so see all
its markings. It was not seen again after the snow, which was the first
heavy storm of the winter. *Glover M. Allen, Newton, Mass.*

Mniotilta varia

1895. *Falmouth, Mass.*

July 11th (lowest trees in village) 25 (Blackbird Sw.)

Notes from Warwick Neck, R. I.

THE BLACK-AND WHITE CREEPER, (*Mniotilta varia*.) In the summer of '82 I was so fortunate as to find a nest containing five eggs and two Cowbirds, and afterwards caught the bird itself. They are quite common in the dense woods, running over the trees in search of food.

O. & O. IX, May. 1884. p. 58.

H. A. Talbot, Jackson Bank,
Providence R. I.

Connecticut, June, 1893.

79.

Ministella varia

June 3rd 4th Fairfield

" 5th 6th 7th 8th 9th 10th 11th } Saybrook

" 13th

" 21st 22nd 23rd 24th 25th 26th Andover

Abundant and very generally
distributed. It is feeding
from out of the water.

June 10th found
Black and White Creeper's nest containing
three young ones and a young Cow Bird
and an added egg. The nest was under
an old chestnut stump in a crevice between
two roots, about the same as the one you
described in the O. and O. for June, 1881.

Nesting notes from Connecticut
J. S. Goff. Excelsior, Conn.
O. & O. VIII, Oct. 1883. p. 78

P.S. Did you ever see
the Blk. & white Creeper
pick worms from a
tree after killing them
place them upon a
stone near the tree
where enough were
thus accumulated
for a "bill full" carry
them to their young.

Saw. saw it today.

J. S. Goff

[June 13/89
H. A. Purdie]

Birds observed in Naval Hospital
Grounds, Brooklyn. G.H. Coues

27. *Mniotilta varia*. BLACK-AND-WHITE CREEPER.—Very common.

Bull. N.O.C. 4, Jan., 1879, p. 32

Birds of the Adirondack Region.
C.H. Merriam.

20. *Mniotilta varia* (Linn.) Vieillot. BLACK-AND-WHITE CREEPER.—Breeds. This is one of the rarer of the summer residents.

Bull. N.O.C. 8, Oct, 1881, p. 227

Arrivals of Mig'y Birds, Spring-1886,
Central Park, N. Y. City. A. G. Paine, Jr.

April 24, *Mniotilta varia*, (636). Black-and-
White Warbler.

O. & O. XI, July, 1886, p. 109

Bds. Obs. at Little and Great Gull Is-
lands, N. Y. Aug. '88 B.H. Dutcher.

20. *Mniotilta varia*. BLACK-AND-WHITE WARBLER.—A bird belong-
ing to this species was picked up from the concrete August 9, having
committed suicide against the tower the night before.

Auk, VI, April, 1889, p. 139

Notes on the Spring Migration of Birds in the
Northern Adirondacks [Aptau], New York [1901]
May 15 to 20.

Black-and-White Warbler. Not common.

E. A. S. Collins, Brooklyn, Pa.

Auk, XIX, July, 1902, p. 265

Notes on the birds of Madison County, New York,
with especial reference to Embury's recent list.

23. *Mniotilta varia*. BLACK AND WHITE WARBLER.—"Common
transient visitant." Mr. Miller calls it a common breeder at Peterboro.

By William R. Maxon. Auk, XX, July, 1903, p. 265

Harris, Mass.
May 15, 1883.

A ♂ taken as above by Greenwood and in the Peabody Academy at Salem is in a plumage new to me. It differs from the typical adult ♂ in ~~being~~ lacking both the median & superciliary stripes the crown being solidly black as in *D. striata*. In addition the cheeks & sides of neck are fulvous ashy, the throat & breast ashy tinged with fulvous & with no defined streaks except a few ^{very} faint ones. There are no apparent structural differences.

Descriptions of First Plumage of Certain North Am. Bbs. Wm. Brewster.

20. *Mniotilta varia*.

"First plumage. Similar in general appearance to the adult female, but markings, especially the two stripes of the pileum and the streaks beneath, much less sharply defined; the streaks of the breast indistinct grayish-dusky, suffused with pale fulvous, those of the back more strongly tinged with rusty. The two stripes on the pileum dull grayish-dusky, instead of deep black. From a specimen in my collection, obtained near Washington, July, 1876."—R. R.

Bull. N.O.C. 3, Jan., 1878, p. 22.

Brewster, Mr. W. J. Townsend, shot two nearly full-grown Mockingbirds (*Mimus polyglottus*) at Arlington, Mass. He found them in a small

occurrence of such strangely abnormal specimens should be a warning to those who would impugn certain 'lost' species which, it has been claimed, have existed only in the imagination of their describers. — WILLIAM BREWSTER, Cambridge, Mass.

192 General Notes. [April

At times the Great-crested Flycatcher was heard uttering his whistling croak. Besides this the only noticeable sound was the clear song of a Warbler. It may be suggested by the syllables, beecher-beecher-beecher-beecher-beecher. It is like the song of the Golden-crowned Thrush, but differs in being in the same pitch throughout, instead of beginning in a whisper and increasing the emphasis and strength with each pair of notes to the last. Guided by the sound, I found the bird high in the tamaracks. It was not shy like the Wood Warblers, so it was easily secured. It proved to be a male Connecticut Warbler.

As I went on, a small bird suddenly

but the coloring & markings
suggest those of a hybrid
perhaps with *P. str. str.*

General Notes.

A singular specimen of the Black-and-white Creeper.—The Essex County Collection (mounted) of the Peabody Academy of Science at Salem, Mass., contains a peculiar Black-and-white Creeper which Mr. Robinson, Curator of the Academy, has kindly allowed me to examine and describe.

According to the accompanying data the bird is a male, taken at about the beginning of the breeding season (Ipswich, Mass., May 15, 1883, by E. C. Greenwood). It differs from the normal condition of the adult male as follows: The forehead, crown, occiput, and nape are dull black, with a rectangular spot of brownish white on the nape, but with no trace of the usual median stripe on the top of the head, even at the roots of the feathers. The opposite sides of the head are *differently marked*. On the left side there is a distinct superciliary stripe of brownish or ochraceous-ash, which begins above the anterior corner of the eye and is continued backward nearly to the occiput, merging posteriorly into a tract of similar color on the auriculars, but separated from it immediately behind the eye by a conspicuous post-ocular spot of black.

On the right side the black descends uninterruptedly to the auriculars, and there is no apparent trace of a superciliary stripe, although the right eye, like the left, is encircled by a narrow whitish ring. Both lores are black, with a slight tipping of brownish on some of the feathers, and both sides of the head and neck, below the line of the eye, are uniform brownish-ochraceous, with a few obscure dusky shaft-streaks on the auriculars.

The exposed surface of the throat, jugulum, and breast is plain brownish-ash, without decided markings of any kind, save well back on the sides of the breast, where there are a few black streaks. Upon disarranging the plumage, however, concealed black is everywhere revealed, each feather having a sub-terminal black bar extending squarely across both webs and separating the light brownish-ashy space at the tip from the somewhat broader, pure ashy one at the bases. The back is colored and marked like that of the autumnal female of *Mniotilta*; the flanks and crissum similarly washed with fulvous. The wings and tail offer nothing peculiar, although they have rather less than the usual amount of white.

In a more general way, this bird may be characterized as a Black-and-white Creeper with the crown of a Black-poll Warbler and a throat and breast which recall (although they will not actually bear comparison with) those of the Connecticut Warbler in autumn. Nearly every one who has seen the specimen has been inclined, at first, to consider it a hybrid, but although the *Mniotilta* element is obvious enough, it is difficult to supply the other parent. Assuming it to have been *Dendroica striata*, the obliteration of the median crown-stripe of *Mniotilta* is accounted for, but a cross with this—or indeed with any other black-crowned Warbler of my acquaintance, would hardly give the peculiar coloration of the breast and throat. Moreover, the generic characters of *Mniotilta*—especially its only really important ones, viz., the peculiar shape and proportion of bill and feet—are in no wise modified as would be certainly the case were the bird an offspring of a cross with a species of another genus. In view of these considerations it is most natural to assume that it is an aberrant—perhaps melanistic—example of the common Black-and-white Creeper. The case finds a fairly close parallel in that of the notorious *Spiza townsendi*, which can be scarcely maintained as a bona-fide species, while it is equally difficult to show successfully that it had a hybrid origin. The occurrence of such strangely abnormal specimens should be a warning to those who would impugn certain 'lost' species which, it has been claimed, have existed only in the imagination of their describers.—WILLIAM BREWSTER, Cambridge, Mass.

Birds of Kalamazoo County, Mich.
Dr. Morris Gibbs.

25. [74.] *Mniotilta varia* (Linn.) Vieill. Black-and-white Creeper.—Arrives from April 22 to May 10. Principally transient, but a few remain during Summer. One nest found by Dennis Nolan contained three young and an addled egg. It was built by the side of a decayed-log on the ground, and was composed in its body of grapevine bark and dried maple leaves, and was lined with roots, hair and fine grapevine bark strips. The nest was found during the last week in May, in a high beech and maple woods.

The song of this bird, if we may call the notes a song, is *Che-scheepy, teepy, seepy, ka wheepy, cheepy*. The call notes are *Chat ter r r r r r r r*, *r r*, or *Tset, set, sit t t t t t*, very rapidly uttered. Sometimes we hear a simple tweet, tweck or pe e c t uttered in a lower key than the usual call.

O. & O. X. Mar. 1885. p. 38

The Singing of Birds. E. P. Bicknell.

Mniotilta varia. BLACK-AND-WHITE CREEPING WARBLER.

With this species, singing continues from its arrival in late April until the end of June. In some years I have not heard its song at all in July; in other years it sings occasionally up to the end of that month. The second song-period begins about the middle of August (9th to 22nd), and may last for a few days only, or for over two weeks; concluding dates fall between August 18 and 28. An exceptional date for song is September 23, 1879, when one of these birds was heard to sing perfectly several successive times. Final departure occurs five or six weeks after the cessation of song. Auk, I, July, 1884. p. 210.

Nest on level ground among dry leaves.

Mr. Jonathan Dwight Jr. tells me that he has taken a Creeper's nest which was built precisely like an Oven-bird's, on level ground among oak leaves and not near either a rock

Nesting of the Black and White Creeper.

BY SAMUEL B. LADD, WEST CHESTER, PA.

This species (*Mniotilta varia*) which connects the *Certhiidae* with the *Mniotillidae*, is in general considered quite common owing to its large breeding range, but until recently was not known to breed here, though given as one of our common migrants. I was not satisfied last year when I found them for the first time, as the birds were then feeding their young, which were at that time (June 6th, 1886) nearly ready to fly. However, I tried to be consoled in thinking they would be located for another season. But I was disappointed again in my second set which were taken May 29th, 1887, as the eggs, four in number, were so heavily incubated that but two of them could be saved.

Regarding the third and last set I took, my note-book runs as follows:—

After a long and tedious day's walk after the eggs of the Worm-eating Warbler, (*Helmintho-*

therus vermivorus) on the 8th of June, with my heels and ankles badly blistered from an ill-fitting pair of boots, I thought (to put in the time, as I did not care to come into town limping like a professional tramp before dark) that I would hunt over a hill-side, where on several previous occasions I had searched, as I thought thoroughly, without success. The Worm-eaters and Black and White Creepers were singing there almost constantly, but the entire undergrowth was a thicket of our laurel (*Kalmia latifolia*), averaging about five feet high, a very common evergreen along our Brandywine hills, especially where rocky and shaded, making it hard work to find anything. At the foot of a small oak near the top of the hill I found a beautiful nest of the Black and White Creeper containing three eggs, which I left for a larger set. Two or three days later I returned and found the female on the nest. She allowed me to get almost near enough to put my hand on her, then suddenly slid out, and after getting a few feet away began feigning lameness. If I had watched her piteous attempts to draw me away much longer I am afraid she would have succeeded. The nest was partly concealed with dead limbs and roots at the foot of a small oak tree. Its general appearance was the same as the others but more compact. It was woven in basket-shape with an inner bark which resembled that of the wild grape vine, and lined with horse-hair. The five eggs are creamy white, sprinkled over their entire surface with light brown, and forming a wreath around the larger end, of a dark brown with a few light purplish spots. They measure .69 x .52, .69 x .53, .69 x .53, .71 x .54, .71 x .54.

O. & O. XII, Sept. 1887 p 150-151

The nest its self, however, did like the Oven-bird's.

Note, Carnegie, N. Y.

June 7th, I took a nest and three eggs of the Black-and-White Creeper. The nest was under the roof of a very large Hemlock, entirely out of sight. The entrance to the nest was a small mouse hole through the decayed leaves. It was only by a chance step that I flushed the parent bird. I waited about five minutes and she returned to the nest and I caught her in my hand. I have collected about here every year since '73, excepting 1880, '81, '82 and '83, and never before have seen this bird at this time of year, although it is a very common migrant.—D. D. S.

494. The Nesting of the Black-and-white Creeper. By A. G. Van Aken. *Ibid.*, XVII, pp. 103-105. *Amer. Naturalist*.

O. & O. X. Oct. 1885, p. 160

Migration Observations in Austro-Hungary.

By the kind courtesy of Herr V. Ritter von Tschusi zu Schmidhoffen, we have been favored with a copy of the Circular of Instructions issued by the Association having these observations in hand. He also sends us some specimen sheets showing the nature of the individual reports. These observations were commenced in 1882, under the auspices of the Austrian Crown Prince, the Archduke Rudolph, who has taken deep personal interest in the investigations. The first year's Report was contributed to by 46 observers, scattered over the provinces of Austria and Hungary. No fewer than 376 observers are expected to send in their observations for the next Report. The Circular of Instructions contains sets of questions—

1st. In regard to the species of birds noticed at each ornithological station; whether each species increases or diminishes, their general habits, etc.

2d. The migratory habits of the birds are to be noticed.

3d. Their habits during the breeding season; and, finally, biological observations are asked for, such as remarks on the changes in their feathers, etc.

As a preliminary, the observations coming in are put together into an annual Report, while a scientific working up of the whole is to follow in the course of years.

Herr Tschusi also sends us his pamphlet descriptive of the Birds of the Hallein Valley, Salzburg.

Black and White Creepers.

(*Mniotilta varia*.)

This beautiful songster is a common spring and fall visitant, arriving the first week in May. A very few remain through the summer. In the spring they are to be met with among the shade trees about the house, in the hedge by the roadside, and in the depths of the forest, where on the

ground searching among the decaying leaves, running about the trunks and branches or among the foliage of trees, they may be seen—everywhere industrious, ever and anon lisping their happy song. Once only, has it been my good fortune to find its nest and eggs. June 20th, 1883, accompanied by two companions, I had been searching a large forest for the nest of some corn-pulling Crows, but without success. We were passing by an immense prostrate hemlock—my companions on one side, and I the other—when suddenly the foremost crow-hunter stopped and pointing just in front exclaimed "What's that?" It was a Black-and-white Creeper, fluttering, tumbling and chirping—reminding me of the antics of a Ruffed Grouse (*Bonasa umbellus*), when her young are disturbed. Greatly to my amusement my companions gave chase, the Creeper keeping just out of their reach. I readily found the nest. A flat moss covered stone, seven inches in length by five in breadth, projected horizontally from the steep hillside. Beneath this natural roof—seemingly placed there by the Omnipotent hand expressly for this purpose—was the nest and its complement of five fresh eggs. The nest was placed upon a foundation of rotten fibrous inner bark, bits of rotten wood, leaves, dry hemlock twigs, fine roots, and a few quills of the hedgehog. Considering the coarseness of most of the material used, it was neatly interwoven, and had a lining of hairs, horse-hair and hairlike-roots. The eggs are oval in shape. Their ground color is white with a slight creamy tint. Points, dots and splashes of faint lilac, and different shades of reddish brown, are irregularly scattered over the entire surface, thickest near the larger end where they are confluent, forming a broad ring. On each egg, over the confluent ring are two or three irregular, almost microscopic, points and lines of dark umber. Dimensions of the set are as follows: .71×.55, .70×.45,

.72×.55, .71×.54, .71×.53, respectively.
C. O. Tracy, Taftsville, Vt.

The Black and White Creeper.
(*Mniotilta varia*.)

June 16th, I found a nest of the Black and White Creeper containing five young birds, one of them evidently a Cowbird. I was in the woods the day previous with my little son who is very fond of birds, and after showing him several nests of Vireos, Redstarts and Golden-crowned Thrushes, I heard a loud, energetic alarm note repeated over and over again. I soon discovered a pair of Creepers in a very excited frame of mind. I watched them for a few minutes and as it was growing dark I resolved to visit that particular locality the next morning, feeling sure that they

had a nest there, and that I could find it. Seven o'clock the following morning found me in the woods again, and the birds were also there, apparently as deeply interested in my movements as I was in theirs. I hunted around for an hour or so without success and then retired from the scene of action and waited awhile, hoping the female would return to her nest and that I should be successful in flushing her later.

They were evidently bound not to be caught napping, for upon my return they were scolding away as earnestly as ever. As I was about to leave them to their chosen solitude, feeling that they had outwitted me, I saw a small dead bird lying upon the ground, and as I stooped to examine it, I discovered the long looked for nest. It was placed near the top of a gently sloping hill, by the side of the trunk of a young oak, and was quite well concealed. It was composed almost wholly of dried grasses and was not a bit too large. The five occupants completely filled it, and the young Cowbird realizing (apparently) that he was an intruder and feeling ashamed of being caught imposing upon such small fry, gave a bound and a lusty chirp, and walked off. The little Creepers followed the example of their big foster-brother, and soon all was confusion. The parent birds hearing the cries of their young were at my side in an instant, chirping piteously and trailing their beautiful wings as if trying to induce me to reach for them. They were within my reach several times, and by their excited actions and droll performances they seemed to say as plainly as if by words, "Please don't hurt our babies. Take us."

In all my bird's nesting experience, I have never witnessed a more tender and beautiful exhibition of the love of parent birds for their helpless young.

Although my collection of eggs was not enriched by this find, yet the experience was one that will always be pleasantly remembered.—Chas. Edw. Prior, *Jewett City, Conn.* O. & O. IX. Sept. 1884. p. 109

**Birds of Bayou Sara, La., Observed
April 1-23, by C. W. Beckham**

I saw but three or four Black-and-white Warblers, but was fortunate enough to find a nest on the 23d, containing four partly incubated eggs. It was on the ground on a densely wooded hillside, loosely constructed of dead leaves, etc., and was roofed over so as to be completely sheltered from the rain. The female did not leave her nest until I was within two or three feet of her, when she flew to the ground feigning lameness, but this old and pathetic subterfuge had just the opposite effect it was intended to have. The nest was admirably concealed and would never have been found had not the bird itself indicated its location.

A. Pleasant House.
Geo L. Tappan

Having safely disposed of this last find we resumed our tramp, and had not gone fifty feet when another bird arose from almost under our feet. This time it was the Black and White Warbler (*Mniotilta varia*), who fluttered lamely off, using all the tactics peculiar to many of the ground-builders when flushed from the nest. Paying no attention to her we devoted ourselves to a search for the nest, and in a few mo-

Notes on some of the rarer birds of Chester Co. Pa. by H. W. H. Jackson, West Chester, Pa.

Black and White Creeper (*Mniotilta varia*.) Another species that our Chester County lists have correctly recognized as a common migrant but never as a summer resident, is the Black and White Creeper. Recently however I had information that a nest and eggs of this species had been taken in our County, and upon investigation learned that Mr. W. S. Everett, of Willistown Township, was the fortunate discoverer of this the first set of eggs ever taken here.

Mr. Everett, though quite a young ornithologist, made his find doubly sure, by securing the female, and carefully preserving the nest—all of which he has kindly loaned to me, together with complete data.

The eggs, four in number, have a ground color of pure white, but are so thickly covered with rich brown markings, mingled at the greater end with blotches of a dark blue hue, as to almost hide the white, and to give them a strong resemblance to a lightly marked set of the Prothonotary warbler (*Protonotaria citrea*.) They differ however in not having the bright, glossy surface of the eggs of that species. The measurements of the four eggs are .68x.52; .68x.53; .70x.53; and .67x.53.

The nest was placed at the foot of a dead stump, sheltered by protecting nooks, though open above, and without cover. It was slightly imbedded in the ground, and its base was composed of dry leaves.

The entire outside is constructed of long strips of grape-vine bark, wound around it. The inside lining is of horse hair, and hog bristles. The cup of the nest is quite large for the bird.

The location of the nest was on a hillside covered with a small growth of Chestnut and Spanish oak.

More recently I have had additional evidence that the Black and White Creeper is a regular re.

re, of last year, while at North Valley hills in my friends, a nest containing one week old, was gentlemen with me. It respect of location and taken by Mr. Everett. feeding the young while by, showing but little. Later in the day we saw a brood of young from bush to bush. they breed earlier than The eggs of these two aid by the middle of

had a nest there, and that I could find it. Seven o'clock the following morning found me in the woods again, and the birds were also there, apparently as deeply interested in my movements as I was in theirs. I hunted around for an hour or so without success and then retired from the scene of action and waited awhile, hoping the female would return to her nest and that I should be successful in flushing her later.

They were evidently bound not to be caught napping, for upon my return they were scolding away as earnestly as ever. As I was about to leave them to their chosen solitude, feeling that they had outwitted me, I saw a small dead bird lying upon the ground, and as I stooped to examine it, I discovered the long looked for nest. It was placed near the top of a gently sloping hill, by the side of the trunk of a young oak, and was quite well concealed. It was composed almost wholly of dried grasses and was not a bit too large. The five occupants completely filled it, and the young Cowbird realizing (apparently) that he was an intruder and feeling ashamed of being caught imposing upon such small fry, gave a bound and a lusty chirp, and walked off. The little Creepers followed the example of their big foster-brother, and soon all was confusion. The parent birds hearing the cries of their young were at my side in an instant, chirping piteously and trailing their beautiful wings as if trying to induce me to reach for them. They were within my reach several times, and by their excited actions and droll performances they seemed to say as plainly as if by words, "Please don't hurt our babies. Take us."

In all my bird's nesting experience, I have never witnessed a more tender and beautiful exhibition of the love of parent birds for their helpless young.

Although my collection of eggs was not enriched by this find, yet the experience was one that will always be pleasantly remembered.—Chas. Edw. Prior, *Jewett City, Conn.* O. & O. IX. Sept. 1884. p. 109

Birds of Bayou Sara, La., Observed
April 1-28, by C. W. Beckman

I saw but three or four Black-and-white Warblers, but was fortunate enough to find a nest on the 23d, containing four partly incubated eggs. It was on the ground on a densely wooded hillside, loosely constructed of dead leaves, etc., and was roofed over so as to be completely sheltered from the rain. The female did not leave her nest until I was within two or three feet of her, when she flew to the ground feigning lameness, but this old and pathetic subterfuge had just the opposite effect it was intended to have. The nest was admirably concealed and would never have been found had not the bird itself indicated its location.

Auk, 4, Oct. 1887. p. 301

A. Pleasant Hour.
Geo L. Tappan

Having safely disposed of this last find we resumed our tramp, and had not gone fifty feet when another bird arose from almost under our feet. This time it was the Black and White Warbler (*Mniotilta varia*), who fluttered lamely off, using all the tactics peculiar to many of the ground-builders when flushed from the nest. Paying no attention to her we devoted ourselves to a search for the nest, and in a few moments success rewarded our efforts. It was composed externally of roots and a few twigs, and lined with hair; the whole being placed in a slight hollow in the ground at the foot of a sapling. The eggs were six in number, four belonging to the parent birds and the remaining two to that avian parasite, the Cowbird. One of the Warbler's eggs was badly cracked or broken, and glued fast to the bottom of the nest. The cigar box was again called into requisition, and, as it was now supper time we turned our steps in the direction of the hotel quite elated at our success.

O. & O. XIV. Nov. 1889 p. 168

It was a thin twilight in there even at noon—
rounded by towering firs;
over a pool of foul smelling, milky water, and
oak stretched out its scrawny, moss-hung limbs
little corner where the remnant of an old live
every step. How well I remember that gloomy
its heart, and was rewarded for my trouble at
the end of the journey.

imbedded in the ground, and its base was composed of dry leaves.

The entire outside is constructed of long strips of grape-vine bark, wound around it. The inside lining is of horse hair, and hog bristles. The cup of the nest is quite large for the bird.

The location of the nest was on a hillside covered with a small growth of Chestnut and Spanish oak.

More recently I have had additional evidence that the Black and White Creeper is a regular re.

of last year, while
North Valley hills in
my friends, a nest con-
out one week old, was
gentlemen with me. It
respect of location and
taken by Mr. Everett.
feeding the young while
by, showing but little

Later in the day we
ing a brood of young
from bush to bush.
they breed earlier than
The eggs of these two
ad by the middle of

I, Feb. 1887, p. 25.

The Black and White Creeper. (*Mniotilta varia*.)

June 16th, I found a nest of the Black and White Creeper containing five young birds, one of them evidently a Cowbird. I was in the woods the day previous with my little son who is very fond of birds, and after showing him several nests of Vireos, Redstarts and Golden-crowned Thrushes, I heard a loud, energetic alarm note repeated over and over again. I soon discovered a pair of Creepers in a very excited frame of mind. I watched them for a few minutes and as it was growing dark I resolved to visit that particular locality the next morning, feeling sure that they

BY J. P. N.

On April 26, 1887, Mr. R. B. McLaughlin found a remarkable set of eggs of the Black and White Warbler (*Mniotilta varia*) in Iredell County, North Carolina. Their peculiarity consists in their size, which is truly extraordinary for this species. There can be no question as to their identity, as the bird was on the nest, and Mr. McLaughlin has collected many sets, and is thoroughly familiar with them. The nest was on the ground at the foot of a small bush, and is characteristic of the species.

The eggs are of a creamy white, beautifully speckled with bright reddish brown and lilac. The markings are much closer together at the larger ends, where they form indistinct wreaths. They measure .76 x .56; .78 x .57; .76 x .56; .76 x .57; .75 x .57.

Another set, collected by Mr. McLaughlin, on April 20, 1887, in the same locality, are creamy white speckled with dark reddish brown and lilac. In four of the eggs the markings form indistinct wreaths around the larger ends, but the fifth egg has the markings almost all at the smaller end. They measure .69 x .51; .68 x .51; .69 x .51; .66 x .50; .69 x .50.

A third set collected by C. O. Tracy, near Hartland, Vermont, on June 20, 1883, are creamy white, heavily speckled with reddish brown and lilac, chiefly at the larger ends, where they form wreaths: .71 x .55; .71 x .54; .70 x .52; .70 x .54; .69 x .54.

O. & O. XIII. Dec. 1887 p. 204-205

BY J. P. N.

The eggs of the Black and White Warbler, (*Mniotilta varia*), while exhibiting considerable variation in size and markings, yet have an individuality of their own which enables one to select them from those of any other Warbler.

In describing the following series of their eggs now before me, they are arranged in the order of the degree of heaviness of their markings. Thus Set I has the smallest and lightest markings, and Set X the largest and darkest.

Set I. April 18, 1888. Iredell County, N. C. Nest at foot of huckleberry bush. Bird on nest. Five eggs, incubation begun. White, thickly speckled all over with hazel. Near the larger end the spots are larger and closer together, where they form an indistinct wreath. There are also a few spots of lilac-gray in the wreath: .65 x .54; .61 x .54; .63 x .53; .64 x .53; .64 x .52; .65 x .53.

Set II. May 2, 1888. Iredell County, N. C. Nest under fallen limb in pine woods. Bird on nest. Five eggs, incubation begun. Creamy white, speckled and wreathed with fine dots of hazel. The wreath is composed of innumerable dots and yet they are not confluent. On two of the eggs there are a number of dots of lavender-gray in the wreath: .65 x .51; .63 x .51; .60 x .50; .65 x .49; .64 x .50.

Set III. May 25, 1888. Buncombe County, N. C. Nest of leaves, grasses etc., lined with hair and fine grass; situated under a small bush. Bird flushed. Four eggs, fresh. Creamy white, sprinkled and speckled cinnamon-rufous. Near the larger ends they are wreathed with minute dots of the same color, very close together, but not confluent. In the wreaths are also dots of lavender-gray, but they do not show unless closely looked for: .65 x .50; .63 x .50; .62 x .49; .64 x .52.

Set IV. April 23, 1888. Iredell County, N.

LOGIST.

183

C. Nest at foot of pine sapling. Bird at nest. Five eggs, incubation begun. White, speckled with cinnamon-rufous. At the larger ends the markings form wreaths, and here there are also many dots of lavender-gray. The eggs are much narrower and more pointed than any of the other set in the series: .69 x .48; .69 x .49; .69 x .49; .69 x .49; .67 x .48.

Set V. June 4, 1882. Monroe County, Penn. Nest under root of a stump at a fence. Birds seen. Five eggs, fresh: White, speckled with bay. The markings are much heavier at the larger ends, where they form indistinct wreaths. There are also some spots of lavender-gray in the wreaths: .67 x .52; .68 x .53; .67 x .53; .64 x .52; .66 x .51.

Set VI. April 20, 1887. Iredell County, N. C. Nest against a small bush, on the ground. Five eggs, fresh. White, with faint creamy tint, speckled and spotted with chestnut. Four of the eggs are wreathed near the larger ends, but the other has most of the specks at the smaller end. All of them are quite pointed: .70 x .50; .69 x .51; .69 x .51; .66 x .51; .69 x .51.

Set VII. April 23, 1888. Iredell County, N. C. Nest on ground, at foot of small bush. Bird on nest. Five eggs, incubation begun. Creamy white, heavily spotted (for this species) with bay and lilac-gray. There are no wreaths on this set, but the spots are larger and thicker near the larger ends: .64 x .53; .62 x .53; .62 x .52; .62 x .52; .62 x .52.

Set VIII. June 20, 1883. Near Taftsville, Vermont. Nest of strips of rotten wood and leaves, lined with hair, moss, and roots; on the ground, under an overhanging stone in a hemlock woods. Quite a quantity of rotten hemlock wood was used as a foundation for the nest proper. The female, when flushed, acted much like a Ruffed Grouse in her endeavors to draw the collector's attention away from her nest, from which she was flushed. Five eggs, fresh. Creamy white, spotted and wreathed (near the larger ends) with chestnut and lavender-gray. Large eggs, and quite pointed, for this species: .72 x .54; .72 x .54; .70 x .54; .70 x .53; .69 x .54.

Set IX. May 28, 1888. Near Taunton, Mass. Nest on ground. Bird seen to fly from nest. Five eggs, fresh. Creamy white, thickly speckled and spotted with hazel and lavender-gray: .67 x .54; .65 x .54; .65 x .54; .65 x .54; .66 x .53. (No wreaths on this set).

Set X. April 29, 1887. Iredell County, N. C. Nest on ground, at foot of small bush. Bird on nest. Five eggs, fresh. White speck-

184

ORNITH

ed and spotted with bay and lavender-gray. (The latter color is confined to the wreaths, which are near the larger ends.) These are the largest eggs in the series, and are indeed quite phenomenal for this species: .77 x .57; .76 x .57; .76 x .56; .74 x .56; .69 x .56.

O. & O. XIII. Dec. 1888 p. 183-4

BY J. P. N.

On April 26, 1887, Mr. R. B. McLaughlin found a remarkable set of eggs of the Black and White Warbler (*Mniotilta varia*) in Iredell County, North Carolina. Their peculiarity consists in their size, which is truly extraordinary for this species. There can be no question as to their identity, as the bird was on the nest, and Mr. McLaughlin has collected many sets, and is thoroughly familiar with them. The nest was on the ground at the foot of a small bush, and is characteristic of the species.

The eggs are of a creamy white, beautifully speckled with bright reddish brown and lilac. The markings are much closer together at the larger ends, where they form indistinct wreaths. They measure .76 x .56; .78 x .57; .76 x .56; .76 x .57; .75 x .57.

Another set, collected by Mr. McLaughlin, on April 20, 1887, in the same locality, are creamy white speckled with dark reddish brown and lilac. In four of the eggs the markings form indistinct wreaths around the larger ends, but the fifth egg has the markings almost all at the smaller end. They measure .69 x .51; .69 x .51; .69 x .51; .69 x .51. Two eggs were perfectly fresh and easily blown in the shell. The other two were perfectly fresh and easily blown in the shell.

A Series of Eggs of the Black and White Warbler.

BY J. P. N.

The eggs of the Black and White Warbler, (*Mniotilta varia*), while exhibiting considerable variation in size and markings, yet have an individuality of their own which enables one to select them from those of any other Warbler.

In describing the following series of their eggs now before me, they are arranged in the order of the degree of heaviness of their markings. Thus Set I has the smallest and lightest markings, and Set X the largest and darkest.

Set I. April 18, 1888. Iredell County, N. C. Nest at foot of huckleberry bush. Bird on nest. Five eggs, incubation begun. White, thickly speckled all over with hazel. Near the larger end the spots are larger and closer together, where they form an indistinct wreath. There are also a few spots of lilac-gray in the wreath: .65 x .54; .61 x .54; .63 x .53; .64 x .53; .64 x .52; .65 x .53.

Set II. May 2, 1888. Iredell County, N. C. Nest under fallen limb in pine woods. Bird on nest. Five eggs, incubation begun. Creamy white, speckled and wreathed with fine dots of hazel. The wreath is composed of innumerable dots and yet they are not confluent. On two of the eggs there are a number of dots of lavender-gray in the wreath: .65 x .51; .63 x .51; .60 x .50; .65 x .49; .64 x .50.

Set III. May 25, 1888. Buncombe County, N. C. Nest of leaves, grasses etc., lined with hair and fine grass; situated under a small bush. Bird flushed. Four eggs, fresh. Creamy white, sprinkled and speckled cinnamon-rufous. Near the larger ends they are wreathed with minute dots of the same color, very close together, but not confluent. In the wreaths are also dots of lavender-gray, but they do not show unless closely looked for: .65 x .50; .63 x .50; .62 x .49; .64 x .52.

Set IV. April 23, 1888. Iredell County, N.

LOGIST.

183

C. Nest at foot of pine sapling. Bird at nest. Five eggs, incubation begun. White, speckled with cinnamon-rufous. At the larger ends the markings form wreaths, and here there are also many dots of lavender-gray. The eggs are much narrower and more pointed than any of the other set in the series: .69 x .48; .69 x .49; .69 x .49; .69 x .49; .67 x .48.

Set V. June 4, 1882. Monroe County, Penn. Nest under root of a stump at a fence. Birds seen. Five eggs, fresh: White, speckled with bay. The markings are much heavier at the larger ends, where they form indistinct wreaths. There are also some spots of lavender-gray in the wreaths: .67 x .52; .68 x .53; .67 x .53; .64 x .52; .66 x .51.

Set VI. April 20, 1887. Iredell County, N. C. Nest against a small bush, on the ground. Five eggs, fresh. White, with faint creamy tint, speckled and spotted with chestnut. Four of the eggs are wreathed near the larger ends, but the other has most of the specks at the smaller end. All of them are quite pointed: .70 x .50; .69 x .51; .69 x .51; .66 x .51; .69 x .51.

Set VII. April 23, 1888. Iredell County, N. C. Nest on ground, at foot of small bush. Bird on nest. Five eggs, incubation begun. Creamy white, heavily spotted (for this species) with bay and lilac-gray. There are no wreaths on this set, but the spots are larger and thicker near the larger ends: .64 x .53; .62 x .53; .62 x .52; .62 x .52; .62 x .52.

Set VIII. June 20, 1888. Near Taftsville, Vermont. Nest of strips of rotten wood and leaves, lined with hair, moss, and roots; on the ground, under an overhanging stone in a hemlock woods. Quite a quantity of rotten hemlock wood was used as a foundation for the nest proper. The female, when flushed, acted much like a Ruffed Grouse in her endeavors to draw the collector's attention away from her nest, from which she was flushed. Five eggs, fresh. Creamy white, spotted and wreathed (near the larger ends) with chestnut and lavender-gray. Large eggs, and quite pointed, for this species: .72 x .54; .72 x .54; .70 x .54; .70 x .53; .69 x .54.

Set IX. May 28, 1888. Near Taunton, Mass. Nest on ground. Bird seen to fly from nest. Five eggs, fresh. Creamy white, thickly speckled and spotted with hazel and lavender-gray: .67 x .54; .65 x .54; .65 x .54; .65 x .54; .66 x .53. (No wreaths on this set).

Set X. April 29, 1887. Iredell County, N. C. Nest on ground, at foot of small bush. Bird on nest. Five eggs, fresh. White speck-

184

ORNITH

ed and spotted with bay and lavender-gray. (The latter color is confined to the wreaths, which are near the larger ends.) These are the largest eggs in the series, and are indeed quite phenomenal for this species: .77 x .57; .76 x .57; .76 x .56; .74 x .56; .75 x .56.

G. & C. N.Y. Dec. 1888 p. 183-4

11. *Migration of some Warblers through Summit, N. J., during the last Spring* [1879]. By George Lawrence Nichols. *Ibid.*, XII, p. 464, July 17, 1879. — Notes on 18 species of the family *Mniotiltidae*. ~~See also p. 465.~~

Protonotaria citrea.

1890

Florida,
Suwanee River.
Mar 20-Apr. I, 1890.

First seen on the 22nd., when a single male was shot. After this it became everywhere abundant along the wooded banks of the river and its connecting creeks. It was rare to find one more than a few yards from water. During the middle of the day, we saw ^{only} a few, but early in the morning and again towards sunset they were very conspicuous, feeding among the terminal twigs ~~and~~ ^{only} bushes and small trees, which bent out over the water, where their yellow breasts were frequently reflected on the dark surface beneath. In addition to the song, which may be imitated closely by the ~~W~~ ^{syllable} ~~is~~ ^{twist} ~~twist-twist-twist-twist~~ this Warbler has two notes, one a sharp, metallic chirp, ~~close~~ ^{twist} similar to that of the Water Thrush but perhaps a trifle softer, the other a wiry ~~twist~~ ^{twist} very like that of the Black and White Creeper. During our stay the males did not at any time sing very freely, but there can be no doubt that they breed abundantly in many of the places where we found them.

Protonotaria citrea

1890 Mass.

A ♂ settled

June 20 Weston -- Mr. Fred. H. Kennard shot an adult ♂ on & bringing
the W. bank of Charles River about $\frac{1}{2}$ mile below the on Charles
"Riverside" station of the B. & A. R.R. ~~On~~ a little bayou
or pocket that makes in for about 100 yards from the
main river. This bayou is separated from the river
by a point about 30 yds across, ~~and~~ wooded with
gray birches and red maples, and, at most seasons, more
or less flooded. On the inner side bordering the
lagoon there is a broad belt of button bushes which
also extend around the head of the lagoon.
On the west side the shore is bold rising to the
crest of a ridge the slope of which, to the water's
edge, is covered with chestnuts and oaks of 30 to
40 years growth.

Mr. Kennard found the bird here on the 16th
and again on the 19th and 20th, shooting it on
the last date. It was always in the lagoon and
usually among the button bushes or maples on
the flooded point but sometimes crossed to
the other shore and went up into the tops of
the taller oaks. Its total range did not, however,
exceed 100 yds, ^{in length} and it was never seen to go back
from the shore more than 20 or 30 yards, although
Mr. K. watched it an hour or more at a time.

It sang loudly and very freely its peculiar notes
first attracting his attention as he was passing
in a boat down the main river. He saw no
female.

" 22 Visited the above mentioned bayou with Mr. K. &
spent several hours searching for the nest. We found
several good holes in low brick stumps but could find
no signs of a ♀ or nest.

Protonotaria citrea.

Arlington, Mass.

1900. Mr. Leon C. Holcomb called here this morning to give me May 20. as near as possible the exact locality for the Prothonotary Warbler shot by him in Arlington last May 20th. He took the train in Boston and got out at Arlington. Then he took the electric that run north along the west side of the Mystic Ponds. He left the electric just beyond the upper Pond where a road runs north-west over a hill. Walking along this road for between quarter and half a mile, he got over the wall on the right hand side of the road and went down a short distance to some low ground interspersed with bushes. Here he saw the Warbler flitting about, and he shot him. This spot should be in Arlington near the northern boundary. In discussing the locality we used H.F. Walling's map of Middlesex County, and I have marked on the map as nearly as Mr. Holcomb could judge the exact spot where he took the bird. He took the bird home and skinned, sexed and mounted it. It was a male. He brought it over here on June 8th, and Mr. Brewster purchased it for \$3.00, and deposited it in his collection.

Museum, Cambridge, Mass.

June 18th, 1900.

Walter Deane

FREDERIC H. KENNARD,
Landscape Architect.
85 Devonshire Street,
BOSTON, - MASS.

Protonotaria citrea

Mass.

Auburndale (Newton) & Weston -

G. & O., XV, 1890, 110 -

Boston, Mass., Dec. 14, 1901.

Mr. Walter Deane,

145 Brattle St., Cambridge,

My Dear Mr. Deane:-

Your card of yesterday at hand. I don't remember the exact phrasedology of any of those notes on the subject of that ~~P~~rothonotary warbler, but I am under the impression that they are all more or less right, while Mr. Brewster is more right than anybody, as he usually is.

As a matter of fact I saw that bird on both sides of the river, both in Auburndale, which is a part of Newton, and in Weston. I think however that he was perching on a Weston twig when I slew him, and he fell into the water of the Charles River, some part of which seems to form the boundary line between the two towns. In hunting for the nest afterwards at Mr. Brewster's suggestion, I got an impression that I had shinned all the trees in both towns. This last however is not of scientific importance.

Sincerely yours,

Fred. H. Kennard

FREDERIC H. KENNARD,
Landscape Architect,
83 Devonshire Street,
BOSTON, - MASS.

Prothonotaria citrea.

Boston, Mass., Jan. 8, 1902.

Mr. Walter Deane,

145 Battle St., Cambridge.

My Dear Mr. Deane:-

In accordance with my conversation with you Monday night, I will now proceed to sift that Prothonotary Warbler business to the bottom. I find in my notes the following:- "Prothonotary Warbler, (Prothonotaria citria) June 16, 1890. Saw what I take to be a Prothonotary Warbler at Riverside, Mass. He sang loudly, clearly and very sweetly, and seemed to like a particular place by the side of the river, for when I returned later in the day he was still there, out on the opposite side of the river.

June 19. Watched this fellow for half an hour at his old haunts. Could find no nest, nor did he seem to be disturbed by my presence. He was quite tame, only keeping just out of my way.

June 20. Shot him. A fine male. Could find no nest, or see no mate. He was in his accustomed haunts.

June 22. Went with Mr. Brewster and looked again for nest or mate of this bird. Conclusion - Old bachelor!"

With regard to the published notices of this bird both in the "O. and O." of July, 1890, and in Mr. Brewster's edition of Minot's "Land Birds and Game Birds of New England," the following remarks seem to be admissible, as I remember it, I happened to be in Webster's

establishment, getting some taxidermist supplies, a few days after I had gathered in this bird; and I spoke to Mr. Webster about it casually, and he asked me as a personal favor to allow him to put it in the "O. and O." When later Mr. Brewster's edition of "Minot" came out, I was somewhat startled at finding the following:- "As this bird was seen in the same place on the previous day, and as it was in full song on both occasions, there were some grounds for suspecting that it was breeding, although no proof of this was actually obtained. W. B."

As Mr. Brewster was, I supposed, thoroughly conversant with the facts of the case, and as he is a pretty careful man, I concluded that my memory must have played me false, and never even looked up my notes until this morning; but all these years I have had, deep down in my boots somewhere, a sneaking suspicion that I saw this bird before "the previous day," and if I did not see him before that day, I never for the life of me could see why Mr. Brewster thought "there were some grounds for suspecting that it was breeding." A bird ought to be able to stay two days in one place without being accused of summering.

Sincerely yours,

Fred. H. Kennard

P.S. I note that Mr. O'Reiginal Thesmer Howe has marked this same error into his Birds of Mass.

F.H.K.

Prothonotary Warbler in Ontario.—While collecting Warblers near Hamilton on the morning of the 23d of May, 1888, I met a group which had evidently just arrived from some favored point in the South, their plumage being particularly fresh and bright, and such rare species as the Mourning and Connecticut Warblers and the Green Blackcap being conspicuous. Presently I noticed one on a willow overhanging the water, which seemed to be a compromise between the Summer Yellow Bird and the Yellow-throated Vireo. On picking it up I was greatly pleased to find I had got a specimen of the Prothonotary Warbler—a female in the ordinary plumage of the season. It is the first record of the species for Ontario and the second for Canada, the first being that of a specimen which was found at St. Stephens, New Brunswick, by Mr. Boardman in October, 1862.—K. C. McILWRAITH, *Hamilton, Ontario.*

Auk, V, July, 1888. p. 322-323.

*Birds of Toronto, Canada,
by James H. Fleming.
Part II, Band Birds, Hypothetical list.
Auk, xx 14, Jan. 1907. 7-98.*

29. **Protonotaria citrea.** PROTHONOTARY WARBLER.—A female taken at Hamilton May 23, 1888, by Dr. K. C. McIlwraith; it has been seen here at least once.

Matineus Id. Maine.

Prothonotary Warbler taken on the Coast of Maine.—A number of bird skins collected between about 1867 and 1874 by the late Levi L. Thaxter and his two sons have recently come into the possession of the Museum of Comparative Zoölogy. Among them is a beautiful adult male Prothonotary Warbler in fresh nuptial plumage. Like many of the others it is encircled by a broad, close-fitting paper band into which, no doubt, it was slipped when freshly skinned and put away to dry, according to a practise much in vogue half a century ago and one followed rather frequently, although not invariably, by the Thaxters. This band was made to serve the place of the usual tag or label, for on it is clearly inscribed in ink, and in the handwriting of Mr. Levi L. Thaxter, the following brief record:—"Matineus Id., Me., August, 1868."

In addition to these data there is the word "Lonys" faintly written in pencil. "Lonys," it seems, was a familiar nickname applied to Dr. Roland Thaxter in his early youth and sometimes used in the possessive case to designate the birds which he himself had killed. Although he has no distinct recollection of the Prothonotary Warbler his brother John, whom he has just questioned on the subject, remembers it perfectly and is certain that it was shot on Matineus Island. It is not less reassuring than satisfactory to have so positive a statement from such a source; for when Mr. Samuel Henshaw first called my attention to the bird I could not help suspecting, and indeed, suggesting to him, that its original paper wrapper might easily have been exchanged through accident for that of some other skin of similar size, prepared in the same way. There is, I believe, but one record besides this of the occurrence of the Prothonotary Warbler in Maine. It relates to a specimen taken by the late Mr. George A. Boardman at Calais on October 30, 1862.¹—WILLIAM BREWSTER, *Cambridge, Mass.*

Auk 26, July 1908, p. 309.

Occurrence of the Prothonotary Warbler (*Protonotaria citrea*) in Massachusetts.—On the afternoon of May 9, 1886, I was rowing up the Assabet River in Concord, Massachusetts, when my companion, Mr. D. C. French, called my attention to a small bird, which was hopping about in some driftwood at the edge of the water. Getting only a glimpse at it I mistook it for a Yellow Warbler and was about to take up the oars again when it came out in full view and I at once recognized an old friend which I certainly never expected to see in Massachusetts, viz.: the Prothonotary Warbler. It seemed perfectly at home, flitting from twig to twig, jetting its tail, and occasionally chirping sharply. Once it sang in an undertone. It was very tame, and as we sat watching it our boat drifted past within a few yards without alarming it. Finally I shot it. It proved to be an adult male in high plumage. Its skin was well covered with fat, its stomach filled with insects, chiefly beetles. The weather was fine at the time, but on the preceding day an easterly storm of some violence prevailed along the Atlantic coast, from Cape Hatteras to New England. To this storm I doubtless owe the pleasure of adding the Prothonotary Warbler to the fauna of our State, for my specimen is the first that has been reported from Massachusetts, although the bird has occurred once previously in Maine, and once in Rhode Island.—WILLIAM BREWSTER, *Cambridge, Mass.*
Auk, 3, July, 1886, p. 410-411.

Two additional Massachusetts Specimens of the Prothonotary Warbler (*Protonotaria citrea*).—At the time of recording* the Prothonotary Warbler taken May 9, 1886, I had no idea that I should ever shoot another in Massachusetts. During the following August, however, I took two more in Concord, one August 17, on the banks of the main river about a mile below the town, the other August 23, on the Assabet, within fifty yards of the spot where the first (May) specimen was obtained. The first of these August birds was a young female, the second an adult male; both had completed the summer moult and perfected the autumnal plumage. I saw and fully identified each on the day before it was shot, Mr. Purdie being with me on one occasion (Aug. 22) as well as examining the freshly-killed specimen next day.

Both birds were restless and rather shy, flitting from place to place, frequently crossing and recrossing the narrow stream. For the most part they kept well up in the trees, seeming to prefer the denser foliated ones, especially the swamp oaks (*Quercus bicolor*) among the broad, dark leaves of which they concealed themselves so successfully that I had the greatest difficulty in getting even a glimpse at them. They seemed perfectly at home in their strange surroundings, as indeed they might well be, for both the Concord and Assabet Rivers, with their densely-wooded banks and half-submerged thickets of black willows and button bushes, afford plenty of just such places as the Prothonotary delights in at the South and West.

Viewed in the light of this later experience the status of the Prothonotary Warbler as a Massachusetts bird presents an interesting problem. The May specimen, considered apart, might be consistently treated as a chance straggler from the South, especially as it occurred just after a storm which prevailed along our entire eastern coast; but the appearance of two others, one of them a young bird, in the same locality, at the height of the return migration, seems to indicate that during 1886, at least, there has been a regular, if limited, flight into and from New England, and that the species has actually bred either within or to the northward of this region. That such a visitation is of annual recurrence is more doubtful, but it is certainly not impossible, especially when we consider that the Prothonotary is a bird of peculiar habits and tastes, and that the haunts which it loves are, in this region, neither numerous nor often visited by collectors.

—WILLIAM BREWSTER, *Cambridge, Mass.* *Auk*, 3, Oct., 1886, p. 457-58.

Protonotaria citrea

Northampton - Mass.

Dr. Christopher Seymour of
Northampton tells me that
in May 1892 he saw a
♂ *Prothonotary* two days in
succession in the same place
— the banks of a small stream
near town where it was
searching for food among
drift wood on the water's edge.
He also says that E. O. Damon
has two of these birds which
he killed on Mt Holyoke.
"I find in my notes that we
saw the *Prothonotary* Warbler
here on May 22 & 23, 1892."
(Letter of Dr. Seymour Nov 29/92)

Recorded by
Aud. 14, 1897, p. 11.

An Earlier Occurrence of the Prothonotary Warbler in Massachusetts.
—In the last issue of 'The Auk' my friend Mr. Brewster, announces his taking a *Protonotaria citrea* in Concord, very properly considering it the first for the State, and I am aware that he will in the October number record his capture of two more in the same town, one of which I had the great pleasure of seeing alive as well as afterwards handling in the flesh. Let me note a fourth specimen that I have seen in the possession of Mr. George Dweley. He assures me that he shot the bird, a male, from the foliage overhanging a creek, it falling into the water. This was in spring, several years ago, but not previous to 1880, in the town of South Abington, Plymouth County.—H. A. PURDIE, Boston, Mass.

Auk, 3, Oct., 1886, p. 488.

Another Specimen of the Prothonotary Warbler in Massachusetts.—Recently when examining the collection of birds made by Mr. E. O. Damon at Northampton, Mass., I saw a beautiful *Protonotaria citrea* which he told me he killed in that vicinity on high ground, in May, 1883, and that two other specimens were shot at the same time by a friend of his. These examples, additional to those already recorded by Messrs. Brewster and Purdie (Auk, July and Oct., 1886), would seem to indicate that the species enters New England regularly.—Jno. H. SAGE, Portland, Conn.

Auk, 4, April 1887, p. 164.

Copied from
my notes on the
Prothonotary Warbler.
June 10, '90. F. H. K.

Saw what I take to
be a Prothonotary Warbler
at Riverdale, Mass.

He was singing loud
& clear & sweetly, and
seemed to him a particular
place, by the side of the
river, for when I returned
later in the day, he was
still there, except on the
opposite side of the river
June 17, 90

Watched this fellow
for 1/2 hour, at his old

THE PROTHONOTARY WARBLER AT NEWTON,
MASS.—On Thursday, June 19, 1890, I noted
a Prothonotary Warbler at Newton, Mass. On
the 20th I brought him home.—[F. H. Ken-
nard.

B. & O. 16. July, 1890, p. 110.

Thomson, I have found no nest; now
else the seem to be obstructed by my
presence, quite true, very feeling just
out of my way!

June 20. 90

Shot him, a fine male, and
has no mate, he was in this
circumstance Thomson,

June 22. 90.

Went with Mr. Brewster, and
brought again for nest a male of
this race. A conclusion. After this
Washington!

THE PROTHONOTARY WARBLER AT NEWTON,
MASS.—On Thursday, June 19, 1890, I noted
a Prothonotary Warbler at Newton, Mass. On
the 20th I brought him home.—[F. H. Ken-
nard.

U. S. O. 10. July, 1890. p. 110.

* Aug 18,
Apr. 1867, p. 164

Friend Brewster -

It's a long time
since I took the Prothomary
Markes - 2 in number -

Sage of Portland - with
them of a few years ago.
I think if you write
him - he could send you a
printed slip he issued relative
to them -

I do not remember as to
their capture - except that I
took them in some ^{hazy}
oak timber where I was
shooting some Black-
Burmians - Sorry I can
not give you more - very truly
C. O. Damon

THE PROTHONOTARY WARBLER AT NEWTON,
MASS.—On Thursday, June 19, 1890, I noted
a Prothonotary Warbler at Newton, Mass. On
the 20th I brought him home.—[F. H. Ken-
nard.

• O. & O., 15. July, 1890, p. 110.

DR. CHRISTOPHER SEYMOUR,
NORTHAMPTON, MASS.

29 Nov 93

William Brewster.
Cambridge

Dear Sir. I find in
my notes that we
saw the Prothonotary
Warbler here on
May 22nd + 23rd 1892
both days in the
same place.

Very truly Yrs

C. Seymour

General Notes.

The Prothonotary Warbler in Massachusetts.—Mr. J. W. Thompson picked up on the morning of Sept. 15, 1894, on the depot platform at Mattapan Station, N. Y., N. H., & H. R. R., a dead Prothonotary Warbler (*Protonotaria citrea*). The damaged bill and breast showed plainly that it met its death by striking against one of the mass of telegraph wires that were hanging directly over the spot where it was found.—M. ABBOTT FRAZAR, *Boston, Mass.*

Auk XII. Jan. 1895 p. 84

Protonotaria citrea at Concord, Mass.—I observed a fine full plumaged male Prothonotary Warbler at very close range in a briery swampy thicket in Concord, Massachusetts, on May 1, 1908. This bird was identical in plumage with the one shot by Mr. Kennard in Anburdale last May, which specimen is in the Collection of the Boston Society of Natural History. The bird I saw was associated with Yellow Redpoll and Yellow Warblers and was unmistakable. Two other experienced bird students were with me.—LIDIAN E. BRIDGE, *West Medford, Mass.*

Auk 25. July-1908 p. 319-320.

Two Prothonotary Warblers in Massachusetts.—I wish to report the presence of a Prothonotary Warbler (*Protonotaria citrea*) in Ipswich, Mass., on Sept. 13, 1913. The bird—a male, I judged, from the brilliancy of its plumage—was associated with a flock of Chickadees near the border of a low-lying, rather moist wood and attracted my attention by a loud, sharp call-note not unlike that of the Water-Thrush.

This is the first record of the Prothonotary Warbler for Essex County, Mass., and I find in the literature the mention of but twelve birds seen or taken in the State.

In this connection I take pleasure in adding the record of a Prothonotary Warbler seen in Arlington, Mass., by Miss Mary E. Hadley on May 21 and 22, 1912. This bird appeared with a heavy flight of migrant warblers.

It sang repeatedly a song suggesting a Water-Thrush and often, alighting on fence-posts, peered about them as if in search of a nesting site.—WINSOR M. TYLER, *Lexington, Mass.*

Auk 31, Jan. 1914. p. 142.

The Occurrence of the Golden Swamp Warbler (*Protonotaria citrea*) in Rhode Island.—The specimen, a male in bright plumage, was shot April 20, 1884, upon the borders of a dense though not extensive swamp in the southeastern corner of the State. The mein of the bird was suggestive of fatigue, and it showed no fear of its captors, who were forced to retreat from it before firing, to avoid excessive mutilation. No other birds were seen in the vicinity; in fact, Yellow-rumped Warblers and Fox Sparrows were the only other birds present in force in this locality at that season. Upon examination the wing (primaries) and tail-feathers showed considerable wear, though not conspicuously more than several specimens shot upon the western range of this bird, with which I have compared it. The only previous record of this beautiful warbler in New England seems to have been that of a fall (October) bird in Maine. This occurrence, so near the annual migration, suggests the query as to whether the especially favorable locality in which it was found may not be regularly visited.—R. G. HAZARD, 2D., *Peace Dale, R. I.*

Auk, I, July, 1884, p. 290.

1010. *A New Bird for Rhode Island and the Second for New England.* [By F. T. Jencks.] *Ibid.*, No. 5, p. 8, and No. 6, p. 3.—A male Prothonotary Warbler, killed in South Kingstown, R. I., April 21, 1884, by R. G. Hazard, 2d. *Rand. Notes Nat. His.*, I

Random Notes Vol. I May 1, 1884

A NEW BIRD FOR RHODE ISLAND, AND THE SECOND FOR NEW ENGLAND.—A Prothonotary Warbler was killed in South Kingstown, R. I., April 21, 1884, by Mr. R. G. Hazard 2d. The specimen is a highly colored ♂. The only other recorded for New England was taken in Maine, in October. The latter bird was doubtless a straggler, but the former, appearing as it does at this season, leads to the conclusion that it may occur regularly, but sparingly. The nature of its haunts, the worst possible swamps, allows of this suggestion. Furthermore, the song being lisping and the bird very restless, enables it to better escape detection. (*Editorial*)

Rare Virginia Birds.

Wirt Robinson, Fort Adams, R.I.

Protonotaria citrea. PROTHONOTARY WARBLER.—One seen in King William Co., April 29, 1879.

Auk, VI, April, 1889, p. 195.

Auk, Vol. III, July, 1886, pp. 366-7.

Prothonotary Warbler near New York City. — In the early morning of June 2 last, near Yonkers, New York, I had the great pleasure of seeing a Prothonotary Warbler (*Protonotaria citrea*) and listening to its song. The exact locality was rather more than a mile east of the Hudson River, and half that distance beyond Van Cortlandt Park at the northern limit of New York City. In the woods at this point a shallow pond, or pool, spreads itself among a scattered grouping of trees and bushes. This was clearly the attraction which kept the bird about the spot, enabling me to watch it at leisure. It was not at all shy, and much of the time was so near to me that, though my field-glass was not dispensed with, there was no need of it for purpose of identification. The exquisite bird kept constantly over the water, frequently coming into conspicuous view on open horizontal branches and sometimes clinging momentarily against a tree-trunk. Its usual motions were leisurely, the movements of the head sometimes quite Vireonine.

The song, which was repeated at short intervals, though not at all remarkable, was very distinctive, and not fairly to be compared with any other known to me. Listening to it, it seemed as if an unpractised ear might perhaps have associated it with the Golden-crowned Thrush, notwithstanding its weaker emphasis, with the five to eight notes pitched all on the same key. The call-note was not heard.

This would appear to be the first known occurrence of this bird in the State outside of Long Island, where the capture of two has been recorded by Mr. Dutcher (Auk, V, 1888, p. 182; X, 1893, p. 236). — EUGENE P. BICKNELL, *New York City*.

Bird Notes from Long Island, N. Y. William Dutcher.

22. *Protonotaria citrea*. PROTHONOTARY WARBLER. — Neither Mr. Giraud, in 1844, nor Mr. Lawrence, in 1866, gave this species in their Long Island lists, nor can I find a well authenticated record for the State of New York. I now have the pleasure, however, of adding this beautiful Warbler to the New York birds, through the kindness of Capt. Scott, who sent me one that struck the light at Montauk Point, during the night of August 26, 1886. It was found dead at the base of the tower on the following morning. The night was hazy, with wind changing from northeast to southwest. So far as Capt. Scott knows the bird was alone, that is, he found no others dead, nor did he see any about the lantern. He states that it was the first one of the kind that he had ever seen. This record, taken in connection with that made by Mr. William Brewster, in this journal, October, 1886,† is particularly interesting. The two specimens taken by Mr. Brewster at Concord, Mass., were shot on August 17 and 23, and my specimen struck the lighthouse on the 26th. Perhaps this last specimen was one of the family from which Mr. Brewster secured two members, but if not so, it certainly to some degree bears out his claim, "that during 1886, at least, there has been a regular, if limited, flight into and from New England."

Auk, V, April, 1888, p. 182

† Auk, Vol. III, 1886, pp. 487, 488.

Dutcher, Rare Long Island Birds.

Protonotaria citrea. PROTHONOTARY WARBLER. — In April, 1888, I recorded a specimen of this Warbler which was sent to me for identification by the keeper of Montauk Light, and which I supposed was the first one that had been taken in New York State. I find, however, that as early as May, 1849, one was shot at Jamaica, Queens Co. It was a male in full breeding plumage, and was mounted by Mr. Akhurst. It is the only one he ever saw from Long Island.

Auk, X, July, 1893 p. 276.

A Prothonotary Warbler in Central Park, New York City. — On May 4 of the present year I saw and identified a Prothonotary Warbler (*Protonotaria citrea*) flying back and forth over one of the islets of the lake in Central Park. I watched it nearly an hour, many times seeing it light in a bush not four feet from where I was sitting. I pronounced it a Prothonotary Warbler, then went to the Museum and examined a skin to make sure of it. I was attracted to the bird by its song which was new to me. On May 5, Mr. Chubb, of the Museum of Natural History, and Dr. Wiegman saw and identified it also. — ANNIE A. CHURCH, *New York City*.
[This is the bird recorded in "Bird-Lore," May-June, 1888, p. 182, where it was given as the date of the observation in Central Park, May 8, 1888.] — E. J. S.]

Auk 26, July-1908 p. 320.

New York.

A Note on the Prothonotary Warbler.— In the many biographical sketches of the Prothonotary Warbler, one finds considerable unanimity concerning the succession of mating and nest building and the sex building the nest. For instance, Loucks in his 'Life History of the Prothonotary Warbler,'¹ states: "Soon after mating, the birds begin to build their nest....In the construction of the nest, the female bird works alone. I have never yet seen a male really aiding in this task." The authors, studying in localities where the bird is more or less abundant during the breeding season, evidently made such notes from series of observations. A single instance contrary to the above is, therefore, probably less important than it is interesting. The case in point is that of a male Prothonotary Warbler which appeared at Ithaca in the spring of 1910. It was first seen May 31 in some willows overhanging a back-water from Fall Creek, one of the main tributaries of Cayuga Lake. It was singing at the time but soon flew down to the water's edge. Here it seized a good sized straw and thence carried it to a hole in a dead stub some five feet above the water. The site was an abandoned Downy Woodpecker's nest, the opening of which had, by some agent or other, been enlarged leaving its borders jagged and rough. While the bird was under observation, it continued flying to and from the hole carrying bits of grass, straw, bark and the like, most of which was obtained at the water's edge. It sang very frequently, often with nesting material in its bill, which was opened so widely during the process that the material was sometimes lost. The nest was not examined closely at this time for fear of disturbing the bird but from the place of observation the nesting material was seen projecting from the hole. Nothing was seen of a female. Two days later the bird had ceased carrying nesting material and was singing in the willows nearby. Upon careful examination the nest was found to be quite complete but there were no eggs nor was there yet any sign of a female. For eleven days this male was seen or heard singing about the spot but no eggs ever appeared in the nest and no female was ever discovered. He was never seen to enter the nest after the third day of observation but, with one exception, was found at all hours within fifty feet of the nesting site, usually singing. On one occasion he was seen to drive away a Bluebird which alighted on the stub. On June 12 he disappeared and did not return.

From these observations it would seem that this male, very shortly after arriving and before finding a mate, selected the nesting site and began building the nest. Furthermore, after completing the nest he waited, apparently for a female, at least nine days before deserting the site which he had chosen. In localities where the species is more abundant and mating is therefore assured, the necessity for the males building the nest may never arise. But the fact that this male, when isolated, was able to select the site and complete the nest in the absence of the female is quite significant.—

ARTHUR A. ALLEN, *Cornell University, Ithaca, N. Y.*

¹ Loucks, W. E. Bulletin 4, Article 3, Illinois State Laboratory of Natural History.

Aug. 23, Jan-1911, p. 116.

Birds Observed at Coosada, Alabama
N. C. Brown

23. *Protonotaria citrea*, (Bodd.) Bd. PROTHONOTARY WARBLER.—Arrived April 12, in full song. After April 20, specimens were seen almost every day, but they never became common. Their haunts were exclusively swamps and the dense hard-wood growths of the water-courses. I found them always active, restless, and noisy. The song is stridulous and piercing, and suggests that of the Black-and-white Creeper, but is more detached and much more strongly accented; it is indicated very well by the syllables, *ch-wiss'*, *ch-wiss'*, *ch-wiss'*, *ch-wiss'*, *ch-wiss'*, *ch-wiss'*, *ch-wiss'*. A female dissected April 23 contained eggs almost ready for deposition; no nests, however, were found.

Ball N.O.C. 3, Oct., 1878, p. 172

Birds of Bayou Sara, La., Observed
April 1-28, by C. W. Beckham

102. *Protonotaria citrea*. PROTHONOTARY WARBLER.—The first individual of this species was seen and captured on April 6, in a willow tree near a pond in the creek bottom, but they did not appear in force until the 12th, on which day I shot five, and saw at least twenty more. They continued to be common in suitable places up to the time of my departure, and a great many pairs were undoubtedly breeding. I found two nests just completed, one on the 16th and the other on the 25th, neither of which contained eggs. They were placed in old Woodpecker holes, in hollow snags about fifteen feet from the ground. Although a number of the birds were seen in the swamp, the most of them were found about the willow trees along Alexander's Creek, a locality, however, only about one half of a mile from the swamp. They were usually quite tame and unsuspicious. Five or six of the twenty-five specimens taken had the feathers of the forehead stained and gummed up with some sticky, resinous substance that could not be washed off.

Ann. 4, Oct, 1887, p. 303

Descriptions of First Plumage of Certain North Am. Bbs. Wm. Brewster.

22. *Protonotaria citrea*.

"First plumage. Remiges, rectrices, primary coverts, and alulae as in the adult. Entire abdomen, anal region, and crissum white; head, neck, back, and jugulum pale greenish-olive, the throat and jugulum paler and more olive, the upper parts brighter and more greenish; rump and upper tail-coverts plumbeous-gray. From a specimen killed at Mt. Carmel, Ill., July 22, 1875; in my collection. In this specimen a large patch on each side the breast is bright gamboge-yellow (as is also a row of 'pin-feathers' along the middle of the throat), indicating the adult plumage."—R. R.

Bull. N. O. C. 3, Jan., 1878. p. 22.

*Recently taken at Mt. Carmel, Ill., on July 22, 1875, by
E. S. Gardner, N. O. C. No. 2.*

A beautiful albino Prothonotary Warbler (*Protonotaria citrea*) is also worthy of mention. The yellow is of normal extent and intensity, but the gray is entirely replaced by pure white. The wings and tail are thus pure white and the body deep intense yellow, the olive of the back being replaced with yellow. The specimen thus looks very much like a white-winged yellow Canary with a Prothonotary's bill. *J. A. Allen, N. Y. City*

Auk, V, July, 1888. p. 325

Prothonotary Warbler in Western
Illinois.

BY OTHO C. POLING, QUINCY, ILL.

The Golden Swamp Warbler, (*Protonotaria citrea*) is perhaps the most abundant bird in the Bottom Lands on either side of the Mississippi for about twenty miles north of Quincy in Illinois, while in Missouri it is most plentiful just across the river. It not only frequents the dense and heavily timbered tracts but is also found in more open places and along the stagnant sloughs and ponds where an occasional clump of birch or willows affords shade and a nesting place. By the first week in May the birds are here in abundance, when pairing is soon begun and throughout the month of May they have a peculiar little song uttered at all times, while the birds may be seen flitting rapidly across the water or perched among the willow tops. The song of this bird may be compared with that of the Yellowbird, though much louder and more distinctly uttered.

Soon after their arrival from the south and when the mating is in some measure settled they select as a nesting site the decayed cavity of some stump or tree leaning over the water, or in deep moist woods. The place selected may be at some distance from any body of water. I have found the nest in holes of piers supporting bridges and within a few inches of the water. In one instance I remember finding a nest with eggs just on the point of being submerged, while the parent bird flitting to and fro showed much distress at their peculiar situation.

The Prothonotary Warbler is a strikingly handsome bird and in the richness of color it has few rivals; when once seen in its native surroundings it is not soon forgotten. The

Oct. 1887.]

AND OC

same may be said of its nest, which is quite as peculiar and interesting in construction and material as in the situation. It consists chiefly in common green moss which remains fresh until after the young have left. The lining is mostly of hair and fine grass. Some nests have nothing but the moss which is loosely thrown in until the cavity is filled to a proper height. I have removed from a single cavity upwards of a quart of moss, besides the grass and other substances.

In most cases the hole in which the nest is placed is badly broken out and decayed and the top of the nest is seldom more than six inches below the entrance, while it is often filled to the top. My first record for 1887 was a nest with six beautiful eggs, placed in the small cavity of a horizontal willow limb reaching far out over the water; the limb being slender and the entrance on the under side there was but little room for any nest and the eggs were arranged on a slight layer of hair and grass, back of which for at least a foot the cavity was filled with moss. This nest, could it have been preserved in its original shape, would present a somewhat singular appearance.

The eggs of this Warbler while showing some variation in markings are usually of a rounded oval shape of nearly equal size at the ends, some being nearly spherical, while others are much elongated. Out of a large number of eggs collected during the past season, the typical set shows measurements as follows: .73 x .55; .73 x .52; .73 x .52; .72 x .52 and .72 x .50.

The usual number of eggs laid is six, sometimes five and but rarely seven.

O. & O. XII, Oct. 1887 p 160-161

331. *Prothonotary Warbler. Protonotaria citrea.* By Fred T. Jencks. *Ibid.*, VI, p. 66.

692. *The Prothonotary Warbler.* By D. E. Lantz. *Ibid.*, pp. 19, 20.
—Its nesting habits at Manhattan, Kan.

The Prothonotary Warbler.

This beautiful little *Protonotaria citrea* is quite rare in Kansas, yet I had the good fortune to find four nests last June.

Early in May I saw a Downy Woodpecker making an excavation in the dead limb of a small elm tree standing on the edge of a forest and on the bank of the Big Blue River. I watched the tree for several days, but, for some cause, the birds abandoned the work.

On June 9, in passing this tree I saw a bird fly from the hole so swiftly that I could not determine the species. I hid in some bushes near by, and after waiting about ten minutes was rewarded by seeing a pair of the Prothonotary Warblers approach through the trees. They flew directly to the elm tree; and, after a moment's hesitation, the female entered the hole, while the male flew away into the forest.

I then crept silently to the nest, which was not more than six feet above the ground. By quickly placing my hand over the hole and allowing sufficient opening between my thumb and finger for the admission of the bird's head but not its body, I easily caught the bird and examined it at my leisure. I have frequently caught Woodpeckers, Bluebirds, Chickadees and Wrens in this manner.

When the bird was released it uttered a short, distinct call which brought the male bird promptly from the trees near by. They then flew away together.

Returning to the tree I secured the nest and complement of five fresh eggs.

This nest was composed of fine grapevine bark, dry weeds, and horse hair. The

structure was rather frail and deeply rounded. Around its upper edge were arrayed bits of skeleton oak leaves whose delicate lace-like tracery of veinlets gave evidence of greater taste than I had before seen in bird architecture.

The eggs were much rounded in shape. The color was white with a pinkish hue, and dotted with spots of brown and lavender. At the larger end these spots were so thick as to become confluent. The eggs were similar in size and markings.

Two more nests of this bird were reported to me on the same date, June 9. Upon visiting them I found in one five young nearly fledged, and in the other two added eggs.

A week or more after the discovery of the first nest I found a pair of the birds not far from the same place. I watched them closely and afterward frequently saw the male alone, but failed to find the nest until after the young had left it, when I found it in the deserted nest of a Bluebird not a hundred feet away from a dwelling house.

I identified the nest by its peculiar architecture and a few egg shells at the base of the tree.

These four nests were alike in situation, all being in damp forests near the river, and in deserted nests of other birds, about six or seven feet above the ground. They were all built of like material and were ornamented with skeleton leaves. Two of the nests were in elm trees and two in willow stumps. I have read no description of the nest of this warbler and do not know whether the above agrees with the experience of older observers.—D. E. Lantz, Manhattan, Kan.

Nesting of the Prothonotary Warbler.

J. P. A.

One of the most beautiful as well as one of the least known of our summer visitors is this bird (*Protonotaria citrea*). To know him one must be familiar with the stagnant ponds, damp, miasmatic, heavily timbered swamps of our grand Mississippi valley. To study well the habits of this very gaudily dressed songster you must spend hours of time, use careful observation, and, last but not least, more than likely make the acquaintance of King Ague.

In this section of country this little known bird is very abundant, and yet is scarcely known to any but the students of ornithology on account of his peculiar habits. For some years past I have been making a special study of this warbler, and it is with no little misgivings that I now propose to give the results of study to my bird-loving brothers, although it is done at the special request of the editors of the O. & O.

These warblers arrive here from about the first to the tenth of May, and immediately select some old deserted woodpecker's hole, or natural cavity, in an old snag or live tree. This is their house, and right valiantly do they hold it against chickadee, wren, or other squatter.

One of the odd things about their selection of a nesting place is their ability to tell where the ponds and creeks will be when the river goes down. But they can. They usually come North when the river (Illinois) at this point is very high, and expanded in an unbroken sheet of water from one to two miles wide. Yet these little fellows select a place for a home that, when the water goes down in the summer, is almost always beside some small piece of water that does not dry out. How they can tell where these will be when the whole face of the bottoms is covered with water is a mystery.

Having selected their nesting place, the female begins by bringing some fine straws or grasses which are arranged in a nice nest in the bottom of the hole. Next she procures some fine strips of grape vine bark, and lines her nest, and lastly covers this all over carefully and thickly with moss, such as grows on the bark of trees standing in the water. This mode of construction is the usual one and makes a very warm, compact nest.

They very rarely use any feathers or hair, and sometimes build their nest entirely of one of the above materials; and I have one nest in my collection that has as carefully a woven

lining of small black rootlets as are ever seen in a Kentucky Warbler's nest. However, these are exceptional, as the nest is usually constructed as above stated.

The entire work of building, so far as I am able to judge, is done by the female bird, her male aiding her only by a continual and vigorous song and occasionally—but very seldom—by bringing a small bill full of material and leaving it on the outside of the hole, for her to carry in and arrange.

The situation of the cavity is something they seem to care little about, only that it must be near the ground, or water, rather. So far as my observation goes they very rarely use a hole higher than fifteen feet, and far oftener lower than five, than above ten. Sometimes, however, they ascend as high as twenty-five feet. As for concealment they seem to care little or nothing, as I have frequently found their nests where I could stand in my boat and see the bird on her nest twenty to fifty yards off—the cavity being shallow; and I have many times found them sitting on a nest that was not over three inches above the water, in the end of a broken leaning snag, and the bird, eggs, and nest all wet with the splash of the small waves.

Many of the little fellows lose their nests by this love of building low down, as sometimes the river rises after they have a nest of young birds, and drowns them out. At such times their distress is pitiful.

Usually about a week elapses between the time they select a nesting site, and the beginning of building. This usually takes about ten days, and fresh eggs are found here from about May 17th to June 15th, as the extreme dates shown by my journal.

The number of eggs varies from three to seven, although I have always believed both were not the real number laid by one bird. I have very seldom found three to be a full set, and then believed that the bird had been disturbed, and out of several hundred of these nests examined by me I have never found but three sets of seven, and, as stated above, I do not believe they were all laid by one bird, but I found that belief on the scarceness of such sets rather than on any tangible evidence.

The usual number of eggs found in a set is five or six in about the proportion of two of five to one of six.

The eggs are strikingly handsome, and present a very great variety of size, color, and markings. To my eye they are among the most beautiful examples of our American eggs,

particularly when fresh, when they present the pink cast of shell so common to birds' eggs, and which is lost on blowing them. They vary from a light background, almost obscured by lavender, reddish-brown, purple and black spots, and blotches, giving the egg something of a chocolate cast at a distance, to a pure white shell sparsely but boldly spotted with the above colors, and occasionally a yellowish phase is taken, which is very rare. Once I took a white set.

The shell is strong, hard, smooth, and with something of the gloss of a woodpecker's egg. Once in a while a person will find a set of their eggs that has the shell rough and calcareous. This is something that to my mind is, as yet, unsatisfactorily explained.

The size of these eggs is given by the books as .70 x .52, and is approximately correct. Yet they vary greatly, and I have taken eggs that would vary from these figures both larger and smaller fully .10 of an inch, and I have in my collection one "runt" egg of this species that is not much larger than a pea. It measures .48 x .40. The other four eggs in this set average .73 x .55. The "little fellow" is in every way as perfectly marked and formed as any of its larger brothers.

Incubation lasts about two weeks and is entirely performed by the female bird, but after the young are hatched the male turns in and helps to feed the family. This is about the only work I know of his doing. Their food consists mainly of the small insects found in the swamps, and the old birds rarely go far from their home until the young are able to fly, when they hunt in families for some time, and usually leave us for the South about September 1st, and we have seen the last of our golden-colored little friends until the next season.

R. M. Barnes.

Lacon, Illinois.

[The experience of Mr. Barnes respecting the number of eggs laid by this bird is different from that of a collector near Burlington, Iowa. Out of forty-two sets collected by him only one set consisted of five eggs, and one set four eggs; while twenty-three sets had six eggs each, fifteen sets contained seven eggs each, and one extreme set consisted of eight. The set of four eggs also had four of the Cowbird, the set of five had three of the same parasite, while eleven of the sets of six each had one Cowbird's egg, and four of the sets of seven also had one each of the same pest.

A series of sixty-six sets of eggs of this warbler now before me contains three sets of four each, seventeen sets of five, thirty sets of six, fifteen sets of seven, and one set of eight.

ORNITHOLOGIST

—AND—

OÖLOGIST.

\$1.00 per
Annum.

PUBLISHED BY FRANK B. WEBSTER.
Established, March, 1875.

Single Copy
10 cents.

Vol. XV.

BOSTON, MASS., DECEMBER, 1890.

No. 12.

A Series of Eggs of the Prothonotary Warbler.

The eggs of the Prothonotary Warbler (*Protonotaria citrea*) are as a rule more brightly marked than those of any other warbler, and their glossy appearance adds much to their beauty. Their variation is very great, but it is believed that the series of seventy sets now before me exhibits all their varieties of size and color.

Set I. June 11, 1888. Burlington, Iowa. Nest in hole in elm tree in water. Six eggs. Two are pure white, unmarked, save for four or five indistinct specks of cinnamon. The other four have a ground color of ecru drab, sparingly speckled and spotted with cinnamon: .73 x .56; .69 x .55; .68 x .56; .70 x .55; .65 x .55; .68 x .55. All entirely without gloss.

Set II. June 6, 1888. Marion County, Mo. Nest in cavity of rotten willow stump, made mostly of moss. Five eggs, incubation begun. White, glossy and speckled all over the surface, but more heavily at the larger ends, with cinnamon-rufous, burnt umber, and lilac-gray: .70 x .60; .78 x .58; .75 x .59; .77 x .59; .74 x .61. Very large eggs for this species.

Set III. June 8, 1888. Lacon, Ill. Nest of moss, etc., in an old knot hole. Six eggs, fresh. Light creamy white, glossy, heavily speckled and spotted with chestnut and olive-gray. The markings are much heavier at the larger ends: .72 x .58; .67 x .57; .57 x .57; .66 x .58; .70 x .57; .71 x .60.

Set IV. June 1, 1888. Lacon, Ill. Nest of moss, hair, etc., in broken end of willow standing in the water. Five eggs, fresh. Glossy white, speckled and spotted all over the service with chestnut and olive-gray. The markings are much heavier at the larger ends: .72 x .60; .74 x .59; .71 x .58; .72 x .59; .71 x .58.

Set V. June 5, 1888. Burlington, Iowa. Nest in willow stump. Seven eggs, incubation begun. Glossy white, speckled all over the

surface with burnt umber and olive-gray: .69 x .55; .64 x .54; .69 x .55; .66 x .55; .68 x .55; .66 x .55; .68 x .54.

Set VI. June 3, 1888. Burlington, Iowa. Nest in hole in sycamore, standing in the water. Seven eggs, incubation begun. Glossy white, speckled all over with chestnut and lilac-gray. The markings are heavier near the larger ends: .69 x .55; .70 x .56; .63 x .52; .64 x .54; .69 x .56; .71 x .58; .64 x .53. This set also contains one egg of the Cowbird.

Set VII. May 27, 1886. Marion Co., Mo. Nest made entirely of a large quantity of damp, green moss, placed in a natural cavity on the under side of a willow limb leaning over the water, and about three feet from the surface. Five eggs, incubation commenced. Light creamy white, glossy. Spotted all over the surface with chestnut and olive-gray: .69 x .56; .68 x .56; .65 x .59; .71 x .56; .70 x .57.

Set VIII. June 11, 1888. Lacon, Ill. Nest of moss in natural cavity in a willow tree, six feet from the ground. Six eggs, fresh. Glossy white, speckled and spotted all over the surface with chestnut and olive-gray. The spots are larger near the greater ends: .74 x .57; .74 x .55; .76 x .55; .73 x .56; .76 x .55; .73 x .55.

Set IX. June 7, 1888. Lacon, Ill. Nest of grass and moss, in a woodpecker's hole not over three inches above the water. Six eggs, fresh. Ecru drab ground color, without gloss. Two of the eggs are unmarked except by a few spots of cinnamon near the larger ends. A third has a well-defined wreath of chestnut spots near the larger end, and a few specks of olive-gray over the rest of the surface. The other three are speckled and spotted with chestnut and olive-gray. The shells of two of the eggs are very rough: .69 x .57; .71 x .58; .73 x .57; .67 x .53; .67 x .53; .71 x .53.

Set X. June 3, 1888. Burlington, Iowa. Nest in dead stump. Six eggs. Light creamy white, glossy. Thickly speckled and spotted all over the surface with chestnut and olive-

BULLETIN
OF THE
NUTTALL ORNITHOLOGICAL CLUB.

Vol. III.

OCTOBER, 1878.

No. 4.

THE PROTHONOTARY WARBLER (*PROTONOTARIA CITREA*).

BY WILLIAM BREWSTER.

It is not so much my present purpose to go over what has been already written concerning this beautiful and striking Warbler, as to present the result of some original observations, made under very favorable circumstances, in Wabash County, Illinois, and Gibson and Knox Counties, Indiana. Nevertheless, a brief preliminary reference to its past biography may not be out of place here.

The species was first described by Boddaert in 1783. Very little concerning its life history* has been put on record by our earlier ornithological writers. Audubon's account is decidedly the best, though it is somewhat brief, and in some respects probably erroneous. Recently more light has been thrown upon the subject, especially in regard to its geographical range and nesting. Judging from the evidence recorded, its distribution is somewhat irregular and erratic, though future investigation may probably be relied upon to fill many apparent gaps. Along the Atlantic coast it occurs more or less regularly—but nowhere, so far as known, numerously—as far north as Charleston, S. C., and as a straggler to Washington, D. C. (Coues and Prentiss); Pennsylvania (Turnbull); and even, as a purely accidental wanderer, to Calais, Me. (Boardman). Westward it is found more abundantly throughout the Gulf States, and extends its migrations north to Kansas, Missouri, and Southern Illinois and Indiana. Indeed, it is probable that its maximum abundance during the breeding season is reached in the States lying about the junction of the Ohio and Mississippi Rivers.

The middle of April, 1878, found me at Mount Carmel, Ill., in

VOL. III.

11

the pleasant company of Mr. Robert Ridgway, with the delightful anticipation of a prospective four weeks among the birds of a, to me, new region. What ornithologist but has felt the sensations arising at such times,—the pleasing certainty of meeting many species that are known to occur; the stimulating hope of detecting others that may, nay, probably will, be found; and the vague dream of securing some rare prize that shall excite the interest of the whole ornithological world? But most potent of all to encourage and sustain are the possibilities, without which the toils and hardships of field collecting would be but sad drudgery. A person of prosaic temperament can rarely if ever make a good field-worker. Enthusiasm must be the spur to success. At the time of our arrival there was a temporary lull in the development of the season. March and early April had been unusually warm and pleasant, and vegetation had far advanced. Many of the forest trees were already green with young foliage, and the leaves of others were beginning to unfold. But a period of cold rainy weather succeeded, and everything for a time was at a stand-still. On April 19 the first Prothonotary Warblers were seen. They seemed to be new arrivals, forerunners of the general migration; shy, comparatively silent, and with that peculiar restraint of manner observable in the first comers of most migratory birds,—a restraint not so much to be wondered at, for a subtle chill and gloom still brooded over the budding forest. Nature seemed to hold her breath in expectancy, and the birds, as well as all wild creatures, are her children, and sympathize in all her varying moods. What lover of the woods has not observed the effect produced upon them by a sudden undefinable something that comes at times over the face of everything,—a slight imperceptible chill, perhaps, or a brief period of cloudiness; where a moment before all was life, bustle, and joyous activity, there is now brooding depression and almost death-like silence. Oftentimes the effect is but transient, and the former state of things soon resumes.

With a few warm days the change came, and Nature entered upon her gala-day. The tree-tops became canopies of dense foliage; from the starlit heavens at night came the mysterious lisping voices of numberless little feathered wanderers pushing their way northward amid the darkness, guided by some faculty which must ever remain hidden from mortals. Each succeeding morning found new-comers taking their places in the woodland choir, and every thicket was enlivened by glancing wings and merry bird voices. The spell was

broken, and among all the gay revellers none were more conspicuous than the beautiful Prothonotaries. Day by day their numbers rapidly increased, until by April 27 all had apparently arrived. We now found the Prothonotary Warbler to be, in all suitable localities, one of the most abundant and characteristic species. Along the shores of the rivers and creeks generally, wherever the black willow (*Salix niger*) grew, a few pairs were sure to be found. Among the button-bushes (*Cephalanthus occidentalis*) that fringed the margin of the peculiar long narrow ponds scattered at frequent intervals over the heavily timbered bottoms of the Wabash and White Rivers, they also occurred more or less numerous. Potoka Creek, a winding, sluggish stream, thickly fringed with willows, was also a favorite resort; but the grand rendezvous of the species seemed to be about the shores of certain secluded ponds lying in what is known as the Little Cypress Swamp. Here they congregated in astonishing numbers, and early in May were breeding almost in colonies. In the region above indicated two things were found to be essential to their presence, namely, an abundance of willows and the immediate proximity of water. Thickets of button-bushes did indeed satisfy a few scattered and perhaps not over particular individuals and pairs, but away from water they were almost never seen. So marked was this preference, that the song of the male heard from the woods indicated to us as surely the proximity of some river, pond, or flooded swamp, as did the croaking of frogs or the peep of the Hylas. In rare instances, it is true, nests were found several hundred yards away from any water; but such apparent exceptions were in nearly every case explained by unmistakable indications that the place, or its immediate vicinity, had been flooded earlier in the season, probably at the time when the site was selected and the nest built. Owing to the exceeding variability of the water-level in the Western rivers, it is not at all improbable that whole tracts of country where these birds breed may be sometimes left high and dry by the receding element before the eggs are hatched.

Everywhere now, from the willow thickets along the streams and the button-bushes on the pond edges came the songs of numerous males, and occasionally one would appear among the foliage or glance across the open water like a ray of golden light. Little idea can be had from preserved specimens of the wonderful beauty and brilliancy of this bird's plumage when alive. Although at times somewhat hard to discover among the yellowish green of their favor-

ite willows, at others, when clinging against the side of an old log or tree-trunk, the yellow head and breast, turned outward to the light, seemed fairly to glow with color, in contrast with the green moss or dusky wood. On cloudy, lowering days I have been surprised at the effect produced by a male flying across an open space close to the dark water. It was as if a sunbeam had glanced athwart the spot, lighting up everything for a moment, and leaving greater gloom from the contrast after it had disappeared. Again and again have I been tempted into shooting one, which I did not really want, but which seemed far brighter than any I had previously taken; upon picking him up, however, I would find him perhaps no more beautiful than many already preserved.

Mating began almost immediately after the arrival of the females, and the "old, old story" was told in many a willow thicket by little golden-breasted lovers. The scene enacted upon such occasions was not strikingly different from that usual among the smaller birds: retiring and somewhat indifferent coyness on the part of the female; violent protestations and demonstrations from the male, who swelled his plumage, spread his wings and tail, and fairly danced round the object of his affections. Sometimes at this juncture another male appeared, and then a fierce conflict was sure to ensue. The combatants would struggle together most furiously until the weaker was forced to give way and take to flight. On several occasions I have seen two males, after fighting among the branches for a long time, clinch and come fluttering together to the water beneath, where for several minutes the contest continued upon the surface until both were fairly drenched. The males rarely meet in the mating season without fighting, even though no female may be near. Sometimes one of them turns tail at the outset; and the other at once giving chase, the pursuer and pursued, separated by a few inches only, go darting through the woods, winding, doubling, now careering away up among the tree-tops, now down over the water, sweeping close to the surface until the eye becomes weary with following their mad flight. During all this time the female usually busies herself with feeding, apparently entirely unconcerned as to the issue. Upon the return of the conqueror her indifference, real or assumed, vanishes, he receives a warm welcome, and matters are soon arranged between them.

The usual song of the Prothonotary Warbler sounds at a distance like the call of the Solitary Sandpiper, with a syllable or two added,—

a simple *peet, tweet, tweet, tweet*, given on the same key throughout. Often when the notes came from the farther shore of a river or pond we were completely deceived. On more than one occasion, when a good opportunity for comparison was offered by the actual presence of both birds at the same time, we found that at the distance of several hundred yards their notes were absolutely undistinguishable; nearer at hand, however, the resemblance is lost, and a ringing, penetrating quality becomes apparent in the Warbler's song. It now sounds like *peet, tsweet, tsweet, tsweet*, or sometimes *tweet, tr-sweet, tr-sweet, tr-sweet*. When the bird sings within a few yards the sound is almost startling in its intensity, and the listener feels inclined to stop his ears. The male is a fitful singer, and is quite as apt to be heard in the hot noontide or on cloudy days, when other birds are silent, as during the cool morning and evening hours. The ordinary note of alarm or distress is a sharp one, so nearly like that of the Large-billed Water Thrush (*Siurus motacilla*) that the slight difference can only be detected by a critical ear. When the sexes meet a soft *tchip* of recognition common to nearly all the Warblers is used. In addition to the song above described the male has a different and far sweeter one, which is reserved for select occasions,—an outpouring of the bird's most tender feelings, intended for the ears of his mate alone, like the rare evening warble of the Oven-Bird (*Siurus auricapillus*). It is apparently uttered only while on the wing. Although so low and feeble as to be inaudible many rods away, it is very sweet, resembling somewhat the song of the Canary, given in an undertone, with trills or "water-notes" interspersed. The flight during its delivery is very different from that at all other times. The bird progresses slowly, with a trembling, fluttering motion, its head raised and tail expanded. This song was heard most frequently after incubation had begun.

In general activity and restlessness few birds equal the species under consideration. Not a nook or corner of his domain but is repeatedly visited through the day. Now he sings a few times from the top of some tall willow that leans out over the stream, sitting motionless among the yellowish foliage, fully aware, perhaps, of the protection afforded by its harmonizing tints. The next moment he descends to the cool shades beneath, where dark, coffee-colored water, the overflow of the pond or river, stretches back among the trees. Here he loves to hop about on floating drift-wood, wet by the lapping of pulsating wavelets; now following up some

long, inclining, half-submerged log, peeping into every crevice and occasionally dragging forth from its concealment a spider or small beetle, turning alternately his bright yellow breast and olive back towards the light; now jetting his beautiful tail or quivering his wings tremulously, he darts off into some thicket in response to a call from his mate; or, flying to a neighboring tree-trunk, clings for a moment against the mossy bole to pipe his little strain or look up the exact whereabouts of some suspected insect prize.

This Warbler usually seeks its food low down among thickets, moss-grown logs, or floating débris, and always about water. Sometimes it ascends tree-trunks for a little way like the Black-and-white Creeper, winding about with the same peculiar motion. When seen among the upper branches, where it often goes to plume its feathers and sing in the warm sunshine, it almost invariably sits nearly motionless. Its flight is much like that of the Water-Thrush (either species), and is remarkably swift, firm, and decided. When crossing a broad stream it is slightly undulating, though always direct. Its food consists of insects, generally of such spiders and beetles as are found about water. Audubon positively asserts that he has discovered minute molluscous animals and small land-snails in their stomachs.

The nesting of the Prothonotary Warbler affords the most interesting phase of its life history. Audubon's account of its nest, "fixed in the fork of a small twig bending over the water," seems in the light of our present knowledge open to serious doubts. At least, it is not the mode of nidification used in the places where it is best known at the present day. Mr. B. F. Goss of Neosho Falls, Kansas, first brought to light the fact that in that locality the bird invariably nested in holes of trees or buildings. Since his discovery of the first nest in 1863, others similarly situated have been found by Dr. Palmer and Mr. Robert Ridgway, at the Kiowa Agency, Indian Territory, and at Mount Carmel, Ill. The first nest collected the past season was found by Mr. Ridgway on April 27. It contained four fresh eggs. This was probably an exceptionally early date, as nearly a week elapsed before any other eggs were taken; and, indeed, the greater proportion of a large number collected between May 8 and May 12 were freshly laid. At least forty nests were examined altogether, about one half of which contained eggs. To give an account of all the various situations in which these nests were placed, would entail a

description of nearly every conceivable kind of hole or cavity that can be found in tree-trunks. The typical nesting-site, however, was the deserted hole of the Downy Woodpecker or Carolina Chickadee. The height varied from two to fifteen feet, though the usual elevation was about four. If the cavity was old and broken out, or otherwise enlarged, it was far more apt to be chosen than a neater and newer one close at hand. The stump selected almost invariably stood in or projected over water, although, as above stated, it was oftentimes left high and dry after the eggs were laid.

Of the many exceptions to the above-described typical site, I will here notice only two of the most marked. A nest discovered May 8 was built in a sort of pocket-shaped cavity in the side of a large cypress stump. The hole descended vertically in the inside of the shell-like wall, the central heart of which had crumbled away. Another, found by Mr. Ridgway, was built in an extremely rotten snag which stood on the edge of a road; the eggs or sitting parent could easily be seen by any one riding by. This nest was several hundred yards away from water.

In the construction of the nest the female labors somewhat desultorily. Fresh green moss enters largely into its composition, and although this substance is readily obtained, a week is sometimes consumed in building the simple little affair. Most of the materials are gathered in the immediate vicinity from half-submerged logs or the nearest dry ground. The male almost always accompanies his partner on her trips to and from the nest, making a great show of hunting up choice bits of material, but apparently never succeeding in finding any to his mind. He usually precedes her on her return, enters the hole to investigate the condition of affairs, pops out his golden head to assure her with a soft chirp that all is well within, and then gives way to allow her to enter, clinging against the bark outside to cheer her labors with his song and await her reappearance. Sometimes, however, both birds remain inside together, although how much assistance the male renders in house furnishing I cannot say. Probably his presence is only tolerated, and he is perhaps often accused of being a nuisance.

The shape and size of the nest vary with that of the cavity in which it is placed. When the hole is deep, it is usually filled up to within four or five inches of the entrance. Thus the nest when removed presents the appearance of a compact mass of moss five

or six inches in height by three or four in diameter. When the cavity is shallow, it is often only scantily lined with moss and a few fine roots. The deeper nests are of course the more elaborate ones. One of the finest specimens before me is composed of moss, dry leaves, and cypress-twigs. The cavity for the eggs is a neatly rounded, cup-shaped hollow, two inches in diameter by one and a half in depth, smoothly lined with fine roots and a few wing-feathers of some small bird.

The number of eggs constituting a full set varies to an unusual degree; two nests were found, each of which contained seven eggs, while in another instance a nest, which from its position could not possibly have been molested, had only one, nearly ready to be hatched. Out of fifteen sets of eggs taken, two included seven eggs; three, six; three, five; four, four; two, three; and one, one egg. The average number is probably five or six. Seventeen specimens before me agree pretty well in size and general shape, nearly all being noticeably blunted at the smaller end. Two selected as extreme examples measure respectively $.73 \times .59$ and $.67 \times .58$. The ground-color is clear, lustrous white, with a high polish. Eggs from different sets vary considerably in markings, but two types of coloration seem to prevail. In one, spots and dottings of dull brown with faint submarkings of pale lavender are generally and evenly distributed over the entire surface. In the other, bold blotches of bright reddish brown are so thickly laid on, especially about the larger ends, that the ground-color is in some instances almost entirely obscured.

In the hope of presenting to the reader's mind some slight idea of the general character and surroundings of the locality where the Prothonotary Warblers were found breeding in the greatest abundance, I close with a brief description of a visit, on May 11, to the Cypress Swamp. Towards the middle of the afternoon we reached Beaver Dam Pond, and embarked in an old weather-beaten dugout. Our guide, a half-breed Indian and a most accomplished woodsman, took his station in the stern, and with a vigorous shove upon his long push-pole sent the frail craft well out into the pond. Before us stretched a long, narrow sheet of water hemmed in on every side by an unbroken wall of forest trees. Around the margin grew a fringe of button-bushes, with a sprinkling of tall slender willows, while behind and above them towered the light-green feathery crests of numerous cypresses. The low shores were

in many places flooded with water for a considerable distance back into the woods, to where the land rose in broken ridges and the cypresses gave way to a growth of oaks, black-walnuts, lindens, and numerous other forest trees. The depth of the water, even in the centre of the pond, did not exceed five feet, and over the greater part of its extent rank grasses, yellow water-lilies, and other aquatic plants reared their tall stalks or broad leaves in such profusion, that everywhere, except immediately around the canoe, the eye rested upon what seemed a meadow of waving green. The few acres of comparatively open water were sprinkled with water-lilies (*Nymphaea odorata*) or thickly studded with the delicate, star-shaped blossoms of the *Cabomba caroliniana*, the moss-like stems of which extended in a perfect labyrinth beneath the surface. As we pushed our way through the denser growths, the stems yielded before the bow with a slight rustling sound. Wood Ducks and Hooded Mergansers rose on every side, while their broods of downy ducklings scuttled off among the water-plants, sometimes huddling close together, a dusky mass of bobbing little forms, at others, when closely pressed, separating and diving like water-sprites. Overhead, Buzzards were wheeling in graceful, interminable circlings, while in their nests upon the tops of some gigantic sycamores, a little back from the shore, stood a number of Great Blue Herons, their tall graceful forms boldly outlined against the sky. From the lower depths of the forest came innumerable bird voices,— the slow, solemn chant of the Wood Thrush, the clear, whistled challenge of the Cardinal, the sweet wild notes of the Louisiana Water Thrush, the measured *pter-dle, pter-dle, pter-dle* of the Kentucky Warbler, and the emphatic song of the Hooded Flycatcher. Higher up among the trees Woodpeckers rattled upon dead limbs, a Tanager sang at intervals, the Tufted Titmouse reiterated its monotonous *peto, peto*, and numerous Blue Warblers added their guttural little trills to the general chorus. From all along the pond edges came the

living stems were filled with stubs in every stage of decay, and perforated with countless Woodpecker-holes, most of them old, and long since given up by their original tenants. That a locality so favorable in every way had not been overlooked by the Prothonotary Warblers was soon evinced by the presence of the birds on all sides in numbers that far exceeded anything which we had previously seen, and careful search soon revealed a number of nests. Probably not less than twenty pairs were here breeding in close proximity. In the larger holes and among the branches were the nests of a colony of Grackles (*Quiscalus purpureus*), and a few Woodpeckers and Carolina Titmice were also nesting somewhere in the vicinity. As we returned down the pond late in the afternoon the sun was sinking behind the tree-tops. The dying breeze still agitated the crest of the forest, but not a breath rippled the still water beneath. The lonely pool rested in deep shadow, save at its upper end, where the slanting sunbeams still lighted up the group of willows, bringing out their yellowish foliage in strong relief against the darker mass behind. The arches of the grand old woods were filled with a softened, mysterious light, and a solemn hush and silence prevailed, broken only by the occasional hooting of a Barred Owl or the song of some small bird among the upper branches, where the rays of the setting sun still lingered. High in air, over the open space the Buzzards still wheeled and soared on easy wing. Ducks were scurrying about in all directions or plashing down among the lily leaves, and a heavy plunge in shore told where a startled otter had risen and disappeared. As the last rays of sunlight touched the top of a mighty sycamore that raised its towering head above its fellows, the Herons left their rookery and laboriously winged their way overhead to some distant feeding-ground. Long in the writer's memory will linger that last glimpse of beautiful Beaver Dam Pond. *Bull. N.O.C. 3, Oct., 1878, pp. 153-162.*

beaten dugout. Our guide, a man-breed indian and a most accomplished woodsman, took his station in the stern, and with a vigorous shove upon his long push-pole sent the frail craft well out into the pond. Before us stretched a long, narrow sheet of water hemmed in on every side by an unbroken wall of forest trees. Around the margin grew a fringe of button-bushes, with a sprinkling of tall slender willows, while behind and above them towered the light-green feathery crests of numerous cypresses. The low shores were

ORNITHOLOGIST

—AND—

OÖLOGIST.

\$1.00 per
Annum.

PUBLISHED FOR THE BRISTOL ORNITHOLOGICAL CLUB.
Established, March, 1875.

Single Copy
10 Cents.

VOL. XIII.

BOSTON, MASS., MARCH, 1888.

No. 3.

Notes on the Range of the Prothonotary Warbler in Indiana.

BY AMOS W. BUTLER, BROOKVILLE, IND.

Naturally one's attention is first directed to the knowledge at hand when he begins his investigation, such has been the writer's course, and with some general remarks concerning our knowledge heretofore of the distribution of *Protonotaria citrea*, this short article should begin. With all the attention that has been paid in recent years to this brilliantly plumaged species, comparatively little has been written concerning its northward range; in fact, except in a general way, not much is known of its distribution.

Professor Baird in Vol. IX., Pacific Railroad Reports, says of its range: "South Atlantic and Gulf States to mouth of Ohio north." He mentions three specimens in the Smithsonian collection from Southern Illinois. Coues' Key, edition of 1872, gives the same southern boundaries, but says: "Straying, however, to Ohio, Missouri, and even Maine." Mr. Ridgway's Manual gives it as occurring in: "Willow swamps and borders of ponds and streams in bottom lands of the Mississippi Valley and Gulf States, north regularly to Iowa, Illinois, Indiana, etc." So far, in the standard works, its northern range has not been approximated within perhaps two hundred miles. The works which treat of local or state bird fauna, give one somewhat more satisfactory answers to his inquiries. Mr. Nelson, in his "Birds of Southern Illinois," gives it as common in that part of the State; and, in his later work on "Birds of Northeastern Illinois," gives it as a "rare summer resident" in the district treated. Dr. Ridgway, in "Birds of Illinois," 1881, says: "Abundant in Southern counties, rare northward." Dr. Wheaton, in his "Report on the Birds of Ohio," Vol. IV., of the geological survey of that State, says: "Only known in this

State as a summer resident in Western Ohio, especially in the vicinity of St. Mary's Reservoir." Dr. Langdon, in his "Birds of the vicinity of Cincinnati," 1877, and in his "revised list," 1879, does not include the Prothonotary Warbler as having been taken in Southwestern Ohio, but, on account of its having been taken taken at St. Mary's Reservoir, indicates the probable occurrence of the species.

Until within the past few years, so far as the public is informed, this species had not been taken in Indiana. Dr. Haymond did not include it in his list of Southeastern Indiana Birds in the Proceedings of the Philadelphia Academy for 1856, nor in his Birds of Franklin County, published in the State Geological Report for 1869. Doubtless some of the collectors in the lower Wabash Valley may not have noticed this conspicuous bird, but the Bulletin of the Nuttall Ornithological Club for October, 1878, contains a paper by William Brewster on "The Prothonotary Warbler," which is the first notice I have of its occurrence within this State. This is supplemented by Mr. Ridgway's paper in the same magazine for January, 1882, which treats of the birds observed in Knox County, Indiana. Both of these papers refer to the southwestern part of the State. Nothing was known of its extension further to the northward until 1884. May 11, of that year, Mr. H. K. Coale, of Chicago, Ills., found the Prothonotaries very abundant in Starke County, in the northwestern part of the State. Several other times that month and next he visited the same locality, and always found them numerous. On one occasion, he notes, "at least fifty pairs are nesting within less than a mile." In February, 1885, Mr. B. W. Evermann supplied me with a manuscript list of the birds he had observed in Carroll County—which is probably forty miles south of the locality referred to by Mr. Coale—and therein notes the species under consideration as a "rare summer resident." In a memorandum of observations

made by him in Carroll County in 1885, he notices the occurrence of a male at Camden and says: "The only one I have ever seen except in Maple swamp in the south part of the County." This is presumably the locality referred to in his list.

For several years, since making the acquaintance of this attractive bird, Mr. Coale has visited the Kankakee swamps in Starke County. Each year the warblers appear to be as common and as ready to be studied as when he first saw them. The northward range of this species, however, is not stopped here. Mr. Coale, in his persistent searchings, has traced it to the shores of Lake Michigan, along which he has occasionally taken it both in Indiana and in Illinois. Such is a sketch of its present known distribution in Indiana. Its range both in that State and Ohio is peculiar. It has never been reported from the southeastern half of Indiana nor from any part of Ohio, except that in the vicinity of St. Mary's Reservoir, which is in the northwestern part of that State.

The Prothonotary Warbler is pre-eminently a bird of the moist and swampy river lowlands, and along the river valleys lie its paths of migration. The borders of the Mississippi River are its great highway, whence a large number of individuals turn to the right at the Ohio's mouth, passing up that stream until they find, entering it from the North, the Wabash, the sloughs and bayous, marshes and lagoons of which, bordered by rank vegetation, make this a spot of unusual attractiveness to them. Here they turn, the greater number to find summer homes along the lower course of that interesting stream. Perhaps in no place are these birds so abundant in summer as in the lower Wabash valley. The peculiar attractions there are so great compared with what the Ohio has to offer, that few, if any, pass farther up that stream. If we may conclude that the Prothonotary's course of migration is along the smaller streams as along the Mississippi, it seems probable we may account for its peculiar distribution. It could extend up the Wabash River to Carroll County, and farther along its course into Ohio, to St. Mary's Reservoir, near which the stream heads. Whether these birds pass the narrow and almost imperceptible division between the drainage of the Wabash and the Kankakee, or also extend their semi-annual pilgrimages along the latter stream remains to be determined. It seems certain, however, that they must pass over the indistinguishable water shed between Kankakee Valley and the Lake Basin, the waters of which, at certain

seasons of the year, find common feeders in many swamps and lakes in northwestern Indiana. No barriers of any consequence being present, it seems probable that the Wabash Valley is the route by which this species is distributed over the region considered.

O. & O. XIII, Mar. 1888 p. 33-34

A Series of Eggs of *Accipiter fuscus*.

BY J. P. N.

The eggs of the Sharp-shinned Hawk (*Accipiter fuscus*, or, according to the A. O. U. nomenclature *A. velox*.) are among the most beautiful of any of the *Raptores*. They are subject to great variation in markings, and yet, as a rule, they can be identified at a glance. With the exception of the eggs of the Sparrow Hawk (*Tinnunculus sparverius*) they are the smallest laid by any of the Hawks found in North America.

In the following series it will be noticed that many of the finest sets were collected by the well-known "J. M. W." (Mr. C. L. Rawson), of Norwich, Connecticut, to whom I am under great obligations for all of his fine clutches of this species, as well as for the permission to use his valuable field notes.

Set I. May 13, 1883. Blue Mountains, Northampton County, Penn. Four eggs, very light bluish white ground color; almost globular. No. 1. Unmarked, except with a very few small spots of burnt umber, which are so scattered and far apart that the general effect is that of an unspotted egg; 1.36 x 1.37. No. 2. Spotted and blotched at the larger end only with dark chestnut; 1.34 x 1.19. No. 3. Faintly clouded and spotted with fawn color. One or two spots are burnt umber; 1.32 x 1.14. No. 4. Lightly and sparingly spotted at the smaller end with burnt umber; 1.34 x 1.16.

Set II. May 30, 1879. Blue Mountains, Northampton County, Penn. Four eggs, ground color faint bluish white. No. 1. Quite pointed; marbled, clouded and spotted with light fawn color. The markings form an indistinct band around the centre of the egg; 1.53 x 1.19. No. 2. Marbled, clouded and spotted with light fawn color; 1.54 x 1.19. No. 3. Marbled, clouded and spotted with light fawn color. The markings are principally grouped around the smaller end; 1.52 x 1.18. No. 4. Marbled and spotted with light fawn color and a few spots of burnt umber; 1.51 x 1.16. The colors on this set are very unusual for this species.

Set III. May 3, 1885. East Templeton, Mass.